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Youth Attitude Tracking Study II  
Wave 18 -- Fall 1987

Report

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YOUTH ATTITUDE TRACKING STUDY  
Fall 1987

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by

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RTI/3624/26/02FR

August 1988

This report has been prepared for the Directorate for Accession Policy, Office of the Deputy Assistant Secretary of Defense (Military Manpower and Personnel Policy [(ODASD)(MM&PP)(AP)]) under Contract Number MDA903-86-C-0066. The Research Triangle Institute (RTI) has been the contractor for this study with Jay R. Levinsohn, Ph.D. and Robert M. Bray, Ph.D., serving as project directors.

The views, opinions, and findings contained in this report are those of the authors and should not be construed as an official Department of Defense position, policy, or decision, unless so designated by other official documentation.

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## PREFACE

The report documents a study performed by Research Triangle Institute under Contract MDA 903-86-0066 as part of the Joint Market Research Program sponsored by the Office of the Deputy Assistant Secretary of Defense (Military Manpower and Personnel Policy) [ODASD(MM&PP)].

The Youth Attitude Tracking Study II (YATS II) is a key component of the Joint Market Research Program which contributes to policy formulation and the development of recruiting marketing strategies. The Military Services provide comments and guidance through the Joint Market Analysis and Research Committee (JMARC). YATS II provides annual data about the propensity of young men and women to enlist in the active military and in the Reserve components. It also measures awareness of military advertising, contact with recruiters, and knowledge of the financial incentives for enlisting.

The Project Directors for the 1987 YATS II were Dr. Jay R. Levinsohn and Dr. Robert M. Bray of Research Triangle Institute. L. Lynn Guess was responsible for instrument development, Frederick W. Immerman for the sampling design, and Dale S. DeWitt for data collection. Ronald Smith coordinated data collection at Amrigon, RTI's subcontractor for some of the data collection. Elizabeth R. Cavanaugh provided editorial assistance and Lillian Clark completed the typing and clerical requirements. Special thanks are due to the tireless efforts of the telephone survey staff in completing the interviews, both at RTI and Amrigon; to Dr. Jay R. Levinsohn for Computer Assisted Telephone Interviewing (CATI) design and implementation; to Cheryl Whitacre for CATI programming; to Nancy Watson for computer programming table generation, and to Dr. Daniel G. Horvitz for his interest and support. Of course, we are indebted to the respondents who provided the data for the study.

Research Triangle Institute acknowledges the efforts of individuals from the Department of Defense in the successful completion of this study. At the Defense Manpower Data Center, Dr. Michael T. Laurence, Market Research Branch, was the principal DoD contact who provided specific direction during all stages of the effort and is the author of Chapter 1 of the report.

In ODASD(MM&PP), Dr. W. S. Sellman, Director, Accession Policy, and LTC Daryl Supak, U.S. Army, provided critical policy guidance and extensive editorial review. Finally, we would like to thank the executive committee and members of JMARC, who provided continuing support for the study and made valuable suggestions regarding questionnaire modification.

## YOUTH ATTITUDE TRACKING STUDY Fall 1987

### EXECUTIVE SUMMARY

Effective recruiting for the military requires reliable and timely recruit market data describing the backgrounds and attitudes of young adults and their intentions to serve in the military. This report describes the results of the 1987 Youth Attitude Tracking Study (YATS) II study conducted by the Research Triangle Institute with the assistance of Amrigon Enterprises, Inc. Data for the study consist of responses to a 30-minute, computer-assisted telephone interview administered to a nationally representative sample of four recruit market groups: 5,642 young males (aged 16-21); 1,103 older males (aged 22-24); 3,448 young females (aged 16-21); and 1,078 older females (aged 22-24).

This report examines enlistment propensity (i.e., the likelihood of young adults to enlist in the military), demographic factors affecting propensity, intentions and attitudes toward the military, enlistment incentives, advertising exposure and Service images, and information-seeking and recruiter contact. These issues are examined as a function of respondent market group, educational status, and predicted Armed Forces Qualification Test (AFQT) category. In addition to the descriptive tabulations, other, more sophisticated analyses that simultaneously examine a set of variables for young males and young females are presented. (SDW)

#### A. Enlistment Propensity

Table X.1 presents the 1987 and 1986 estimates of positive propensity to serve in the active military and the Reserve components. In 1987, as in all the years for which comparison data are available, young males expressed the highest propensity (32.4 percent) for active military service, followed by older males (16.1 percent) and young females (15.0 percent), with older females showing the lowest level of positive propensity (4.7 percent). Propensity estimates for 1987 closely paralleled those for 1986; only one statistically significant change in propensity levels between 1986 and 1987 was found. Young males showed a 2.2 percentage point increase in propensity toward joining the Air Force.

Table X.1. Positive Propensity to Serve in the Active Military and Reserve Components, 1986-1987

Propensity Measure	Market Group							
	Young Males		Older Males		Young Females		Older Females	
	1986	1987	1986	1987	1986	1987	1986	1987
Composite Active Propensity <sup>a</sup>	32.0	32.4	14.2	16.1	12.8	15.0	5.0	4.7
Army	15.8	15.5	7.9	8.4	5.8	6.8	2.4	2.2
Navy	11.1	12.8	5.6	6.7	4.1	5.3	2.0	2.1
Marine Corps	11.2	11.4	5.4	5.7	3.3	3.6	1.8	1.5
Air Force	16.0	16.2*	6.9	8.9	8.0	8.6	3.5	3.3
Composite Reserve Propensity <sup>b</sup>	20.0	21.1	11.5	13.9	7.6	8.5	5.5	3.7
Army National Guard	7.3	7.5	5.5	5.6	2.2	2.9	2.3	1.6
Air National Guard	4.7	5.5	3.2	3.2	1.8	1.8	1.3	0.5
Army Reserve	5.8	6.2	3.1	3.8	2.1	2.9	1.0	1.4
Navy Reserve	2.0	2.2	1.3	1.1	0.8	0.7	0.9	0.4
Marine Corps Reserve	2.1	2.1	1.6	1.2	0.3	0.6	0.6	0.1
Air Force Reserve	4.5	5.1	2.2	3.9	2.7	2.4	1.3	1.3
Coast Guard Reserve	0.9	0.8	0.4	0.1	0.2	0.3	0.2	0.0

Note: Tabled values are column percentages. Estimates for 1986 are based on interviews with 5,382 young males, 1,068 older males and 3,191 young females, and 1,102 older females. Estimates for 1987 are based on interviews with 5,642 young males, 1,103 older males, 3,448 young females, and 1,076 older females.

<sup>a</sup>Propensity to serve in at least one active Service.

<sup>b</sup>Propensity to serve in at least one Reserve component (National Guard or Reserves).

Source: Questions 438-441, 505-513.

\*1986-1987 comparisons were statistically significant at the 95 percent confidence level.



Young males and females were significantly less likely to express positive propensity toward service in the Reserve components than toward active military service. In contrast, older males and females showed equal levels of propensity toward Reserve or active military service. In general, positive propensity for both the active Services and the Reserve Components declines with increasing educational status and higher categories of predicted AFQT.

Multiple regression analyses for young males and young females indicated that attitude toward serving, age, and predicted AFQT were the most important predictors of composite active propensity. Propensity increased with positive attitude and decreased with both increasing age and predicted AFQT. Attitude, age, and predicted AFQT also interacted in predicting the expression of propensity. Both older respondents and high quality respondents with a positive attitude toward serving in the military are less likely to express positive propensity than younger or low quality respondents with a positive attitude.

#### **B. Plans for the Next Few Years**

When asked what they will most likely be doing in the next few years, seven percent or fewer of any group expect to be serving in the military. A majority of all respondents replied "attending college." The younger males and females are especially likely to express an interest in attending college. When asked to specify their most likely plan for the coming year, or following high school graduation, about 50 percent of the younger groups, but only 11 percent or fewer of the older groups, expect to be attending school full time. The majority of the older groups expect to be working full time.

Both young male and young female High School students were more likely than Graduates to expect to be attending school full time in October of 1988 or following high school graduation. Within each educational status group, Category I-III A youths were more likely than those in Category IIIB-V to expect to be in school and less likely to expect to be working.

### **C. Interpersonal Influences and Attitudes Toward the Military**

Between 71 and 76 percent of the males have given serious or some consideration to joining the military. Only 47 to 53 percent of females have done so. In line with this finding, 41 percent of the young males, 31 percent of the older males, 25 percent of the young females, and 21 percent of the older females indicate positive attitudes toward joining the military. Similar percentages of each market group also report that "important others" are favorable toward their serving in the military. Between 32 and 36 percent of all the groups said that they would tell an interested friend that seeing a military recruiter was a good idea. Positive propensity was strongly associated with attitudes, perceived norms, and behavior favorable toward military service.

### **D. Enlistment Incentives**

General intentions to join the military after being told the amount of starting pay are either similar to (for the males) or significantly more positive (for the females) than general intention levels reported before being told the actual amount of starting monthly pay for an enlisted person.

Between 48 and 64 percent of the respondents report an awareness of military programs designed to provide financial assistance for college or vocational training. The Army was mentioned most frequently as the Service with these programs.

### **E. Advertising Exposure and Service Images**

Very large majorities of the four market groups report awareness of military advertising for the four active Services. The highest percentages of advertising awareness (67-73 percent) appear for Army advertising and the lowest (30-39 percent) for Coast Guard advertising. Overall advertising awareness for the four individual Services, which had been declining since 1984 for both males and females, shows significant increases among young males for all four Services, and among young females for the Army and the Marine Corps.

The Army is the most common response to a number of statements designed to assess respondents' images of the four active Services. The Army was mentioned most often for six of ten images: provides money for education;

teaches valuable skills and trades; opportunities for promotion and advancement; equal pay and advancement for men and women; defending your country; and, work in or near a combat zone. The Air Force is the most frequent response to providing a high technology environment to work in. The Marine Corps is mentioned most often with regard to lack of personal freedom. The Navy is mentioned most often regarding extended duty away from immediate family.

#### **F. Information-Seeking and Recruiter Contact**

Fewer than 11 percent of the young males and females mailed a postcard or coupon for information about the military in the past 12 months, and fewer than 5 percent made a toll-free telephone call. Between 20 and 41 percent of the young groups and between 8 and 20 percent of the older groups spoke with someone about military service in the past year. Fewer than 29 percent of the respondents report ever having taken the Armed Services Vocational Aptitude Battery (ASVAB), with positive propensity respondents more likely to have taken it than negative propensity respondents.

Between 45 and 50 percent of the males and between 22 and 25 percent of the females report ever having spoken with a recruiter from any of the four active Services. Those expressing positive propensity are more likely to have done so than those expressing negative propensity. Young males and young females who report recruiter contact in the past 12 months are more likely than those not reporting contact to be 18-19 years old, Black, and desirous of additional education.

# 1. THE SEARCH FOR THE MILITARY RECRUITING ANALYSTS' HOLY GRAIL: THE QUALIFIED MILITARY AVAILABLE (QMA) STATISTIC\*

Every major branch of science has among its investigators those whose preoccupation is the search for their discipline's "Holy Grail"--the seemingly endless and unfruitful search for the basic truth upon which all else would rest. For military recruiting analysts, the Qualified Military Available (QMA) statistic seems to be a kind of Holy Grail. This statistic, which describes the percentage of American-youth who are qualified and available for military service, would, if it were in hand, serve as the basis for the development of all recruiting strategy and planning.

The characterization of the efforts of researchers to find the basic truths underlying all else in their fields as the search for a Holy Grail is not meant to suggest that their efforts are a medieval-like, quixotic search for something irretrievably lost in antiquity. Rather, it suggests that the truth has not yet been found due to the limitations of present knowledge and the available investigative tools. The specification of the QMA statistic is not limited by an absence of investigative tools, for these do exist, but rather the application of the available tools to the search. The purpose of this introductory essay to the 1987 Youth Attitude Tracking Study report is to describe the role the YATS holds in our current understanding of the QMA population.

The beginning point for the QMA is the total population of military-age youth (see Figure 1.1). This total is then reduced by those who do not meet the minimum educational, aptitude, physical, and moral standards for military service to yield the qualified population. This qualified population is further reduced by the numbers who are enrolled in college and considered unlikely to enlist in the military, those presently serving or with prior service in the military, and those who are institutionalized to yield the qualified and available population -- the QMA. The portion of this QMA population that is interested in serving is the qualified and interested military available population. Before discussing the role of the YATS, a brief history and commentary on the status of the search for the QMA is in order.

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\*This chapter was written by Michael T. Laurence of the Defense Manpower Data Center.

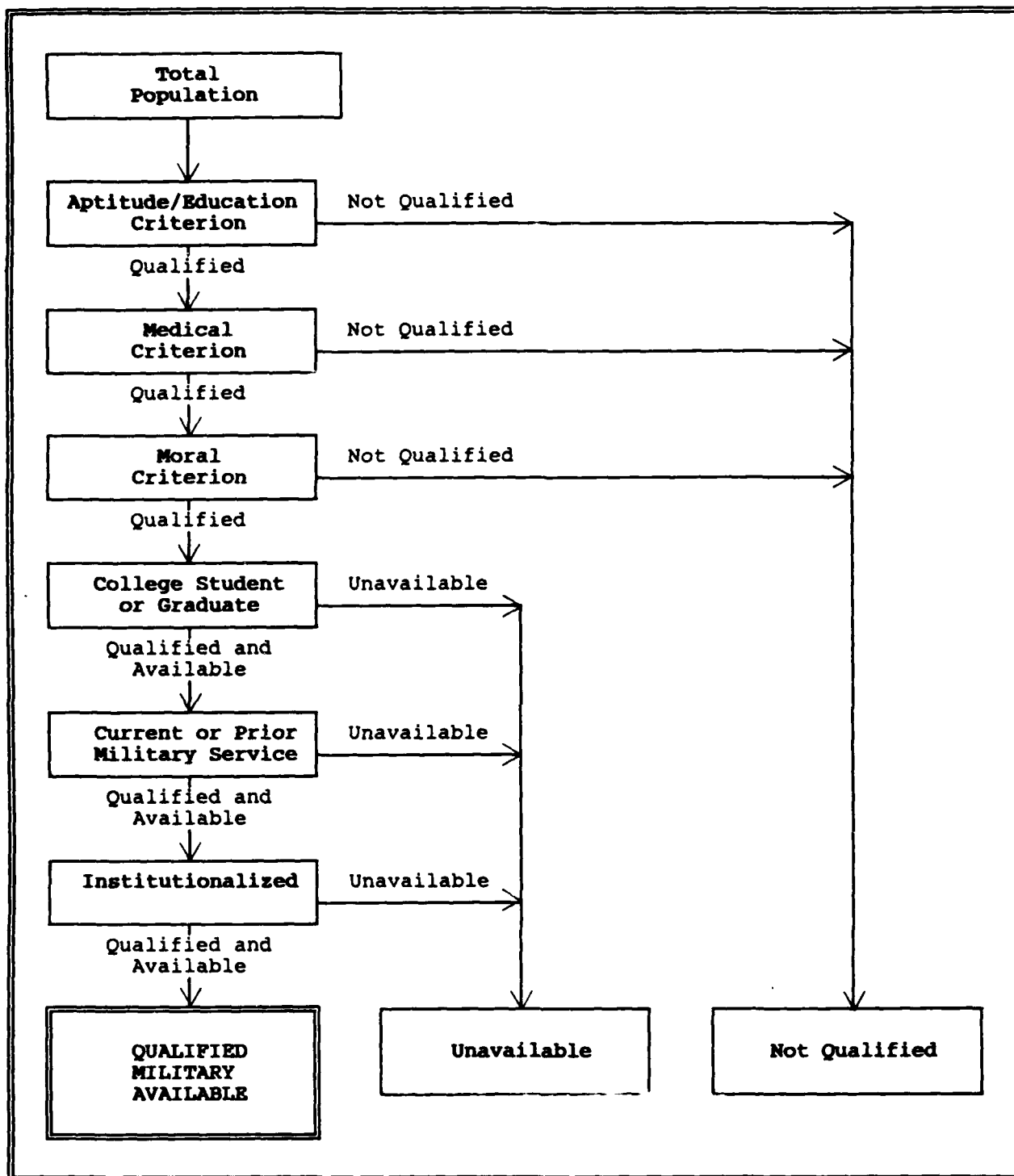


Figure 1.1 Schematic diagram of the conceptual framework for estimating the Qualified Military Available (QMA).

## A. One-Third of a Nation

The first serious attempt, and to date the most comprehensive, to specify the QMA was presented in One-Third of a Nation: A Report on Young Men Found Unqualified for Military Service (The President's Task Force on Manpower Conservation, 1964). Based on the data obtained from actual examinations of enlistees and draftees conducted between August 1958 and June 1960, the overall rejection rate among the entire draft-age (18-26 years) male population was estimated to be 31.7 percent. Composing this total were 14.8 percent who failed only the medical examination, 11.5 percent who failed only the aptitude tests, 1.5 percent who failed both the medical and aptitude tests, and 3.9 percent who failed to meet the moral character standards.

Looking at these data some 25 years later, one is first struck by their age. Since 1964, the standards of fitness for military service have undergone significant changes that could be expected to produce very different estimates. Absent from the standards applied in 1964 are those currently in effect regarding high school graduation status. While the medical standards, except those for height and weight, have changed little since the early 1960s, the changes in the availability and sophistication of health care might be expected to produce different estimates of the percentage of youth who would fail to meet this criterion. Fundamental changes in the notions of acceptable behavior and the proliferation of psychotropic drugs in American society, as well as actual modifications of the moral character standards for enlistment, could be expected to result in different estimates of the percentage of youth who would fail to be morally suitable for military service.

Further, statistical methodology and analysis have undergone a qualitative evolution since 1964 that, when applied to the data underlying the 31.7 percent disqualification estimate, might produce a different and more accurate result. The estimates presented in One-Third of a Nation were not based on a nationally representative probability sample of all military-age youth and thus may contain biases which, if corrected, might yield a very different result. Finally, estimates of the disqualification rates for females were not made since unlike the present, the role of females as part of the military was very limited.

## B. The Profile of American Youth and Screening for Service

The problems contained in One-Third of a Nation in the areas of sampling and statistical methodology, the absence of data for females, changes in aptitude standards, and the introduction of high school graduation status as a criterion for enlistment were all addressed in an unprecedented study entitled Profile of American Youth (Department of Defense, 1982) and a companion study entitled Screening for Service (Eitelberg, Laurence, Waters with Perelman, 1984). The Profile of American Youth presented the results of the administration of the Armed Services Vocational Aptitude Battery (ASVAB) in 1980 to a nationally representative probability sample of 17-24 year-old males and females. Based on the results of the test scores obtained from this study, it was estimated that 8.2 percent of all American males and 6.5 percent of all American females between the ages of 18 and 23 at the time of testing would fall in AFQT Category V (Category V includes all examinees who score below the 10th percentile on the Armed Forces Qualification Test) and thus be disqualified by law from military service. For the males the 8.2 percent disqualification rate is substantially lower than the 13.0 percent reported in One-Third of a Nation.

Each of the Services currently employ standards that simultaneously consider both high school graduation status and aptitude scores from the ASVAB. Generally, these standards require higher aptitude levels of those applicants who are not high school graduates, and vice versa. Screening for Service applied the Service-specific standards in effect in 1981 to the aptitude and high school graduation status data collected in the Profile of American Youth and estimated that between 23.7 percent (under the Army standards) and 37.4 percent (under the Air Force standards) of all 18-23 year-old males would be disqualified from the military. Among all 18-23 year-old females, between 21.7 percent (under the Army standards) and 53.6 percent (under the Marine Corps standards) would be disqualified. A comparison of these disqualification rates to the rate reported in One-Third of a Nation clearly reveals that the percentage of youth who are disqualified on the aptitude and educational criteria in 1980 was dramatically larger than in the 1958-1960 period when aptitude alone served as the screening criterion.

### C. U.S. Air Force Personnel Force Composition Study

A more recent analysis presented in the 1985 U.S. Air Force Personnel Force Composition Study (USAF Special Study Team, 1985) took the data presented in One-Third of a Nation and Screening for Service and produced updated estimates of the "combined" disqualification rates. Using the least restrictive Army aptitude and high school graduation estimates presented in Screening for Service (23.7 percent for males and 21.7 percent for females); adjusted estimates of medical disqualification rates (19.1 percent for males and 38.2 percent for females) based on the rate for males reported in One-Third of a Nation; and community-based cohort studies of juvenile delinquency rates in two U.S. cities as the basis for estimating moral disqualification rates (4.8 percent for males and 1.6 percent for females), the Air Force estimated the combined disqualification rates to be 41.2 percent for males and 52.4 percent for females. This 1985 estimated disqualification rate for males was 9.5 percentage points higher than the 31.7 percent rate reported in One-Third of a Nation in 1964.

These final estimates by the Air Force are subject to some reservation because of the non-representativeness of the samples upon which the physical and moral disqualification rates were based and the absence of an adjustment to the combined percentage for those who would be disqualified on more than one of the three criteria. Particularly perplexing, considering the fact that the medical standards remained virtually unchanged between 1962 and 1985, is the 19.1 percent disqualification rate for males on the medical criteria compared to the 14.8 percent reported in One-Third of a Nation.

### D. The Medical Fitness of American Youth For Military Service

This latter concern was addressed in a 1987 report entitled The Medical Fitness of American Youth for Military Service (Overbey, Winter, and Laurence, 1987). Using medical examination data collected from a nationally representative sample of 16-24 year- old males and females as part of the National Health and Nutritional Examination Survey II (NHANES II) (National Center for Health Statistics, 1981) and applying the current enlistment medical standards, it was estimated that 21.7 percent of the



males and 44.4 percent of the females would be disqualified. While these percentages were only marginally higher than those reported by the Air Force, the diagnostic causes for disqualification among the males in the NHANES II sample and the males in One-Third of a Nation, upon which the Air Force estimates were based, differed dramatically. These differences could be accounted for only by the non-representativeness of the sample used for the estimates in One-Third of a Nation.

One shortcoming of the estimates presented in The Medical Fitness of American Youth for Military Service was absence of medical data in the NHANES II for a number of diagnostic areas covered by the medical enlistment standards. Had these data been available, the disqualification rate reported would have been higher. Another shortcoming was that no data were available in the NHANES II that would permit relating the disqualification rates for medical reasons to any of those rates for the other enlistment criteria.

#### E. The Current Status of QMA Estimates

The statistics from the four studies just described are summarized in Table 1.1. The data from Screening for Service and The Medical Fitness of American Youth for Military Service are presented together so the reader can get an approximation of the combined disqualification rates on the aptitude, educational attainment, and medical criteria. These combined data represent the most up-to-date and methodologically sound estimates of the QMA available.

Aside from the much higher disqualification rates for females compared to males and differences across Services, the most notable feature of this table is the number of question marks that indicate unknown percentages. Were disqualification rates for the moral character criteria known and added to the Screening for Service and The Medical Fitness of American Youth data, the combined disqualification rates would be higher than those presented. Similarly, were accurate estimates of the percentages disqualified on both the aptitude/high school graduation status and medical fitness criteria, as in One-Third of a Nation, as well as all other combinations of multiple disqualification available, the combined disqualification rates would be reduced.

Table 1.1

Estimates of the Percentage of Military-age American Youth  
Disqualified for Service on the Various Enlistment Criteria

Males		Screening For Service and The Medical Fitness of American Youth				
	One-Third of a Nation	USAF Force Composition Study	The Medical Fitness of American Youth			
			Army	Navy	Marine Corps	Air Force
Aptitude/Education Only	11.5	23.7	23.7	25.0	27.6	37.4
Medical Only	14.8	19.1	21.7	24.1	21.7	28.3
Both Aptitude and Medical	1.5	?	?	?	?	?
Moral Only	3.9	4.8	?	?	?	?
All Other Combinations	?	?	?	?	?	?
Total/Combined	31.7	41.2	45.4	49.1	49.3	65.7

Females		Screening For Service and The Medical Fitness of American Youth				
	One-Third of a Nation	USAF Force Composition Study	The Medical Fitness of American Youth			
			Army	Navy	Marine Corps	Air Force
Aptitude/Education Only	?	21.7	21.7	42.2	53.6	39.6
Medical Only	?	38.2	44.4	24.4	39.8	33.0
Both Aptitude and Medical	?	?	?	?	?	?
Moral Only	?	1.6	?	?	?	?
All Other Combinations	?	?	?	?	?	?
Total/Combined	?	52.4	66.1	66.6	93.4	72.6

As defined earlier, QMA is the qualified population reduced by those in college, those presently serving or with prior service in the military, and those who are institutionalized. The data presented in Table 1.1 are estimates of the entire military-age population that were found disqualified. In the absence of accurate estimates of the sizes of the "non-available" subpopulation and the related adjustments to the disqualification estimates presented in Table 1.1, the determination of the QMA is incomplete.

#### **F. The YATS and Estimates of QMA**

The principal purpose of the annual administration of the Youth Attitude Tracking Study (YATS) is to assess the propensity of a representative sample of military-age Americans for service in the military. By determining the percentage of American youth who express a positive likelihood for service, the Department of Defense and the Services are able to supplement their estimates of QMA to yield estimates of the number of youth who are both qualified and interested, thus targets for recruiters.

The sample design of the YATS takes into account only some of the enlistment criteria described earlier. Using random digit dialing procedures, residences that include men and women in the 16-24 year-old range are first identified. This first step thus excludes those youth who are institutionalized and those, such as college students, living in group quarters. Through screening interviews those youth currently serving or with prior service in the military, those participating in Reserve Officer Training Corps (ROTC) programs, and those with more than two years of college are excluded from the YATS sample to yield the study-eligible youth who are then interviewed. In the course of the interview the level of interest toward serving in the military is ascertained, as is the level of educational attainment. Questions about high school grades and courses taken and about demographics and background serve as input into a regression model that yield data predicting the aptitude level of the respondents. Thus, the only QMA criteria that are not either directly or analytically determined are physical and moral fitness.

Table 1.2 presents the QMA estimates derived from the 1987 YATS sample of 16-21 year-old males. The U.S. Census Bureau estimated that, as of July 1, 1987, 11,343,000 males, aged 16-21 years, resided in the United States. Of this total, 29.3 percent or 3,323,000, were excluded from the YATS sample because they did not meet the screening criteria. In terms of the QMA, these males are considered to be "unavailable" for military service. Of the 8,020,000 young males remaining, the YATS Eligibles, or in QMA terms, the "available" subpopulation, 3,858,000 or 34.0 percent of the total population were high school graduates or seniors. Of these high school graduates and seniors, 2,439,000, or 21.5 percent of the total population, were predicted to be above average in terms of aptitude and fall in AFQT Categories I-IIIa.

These youth are characterized by the Services as "high quality" and are the particular targets of their recruiting efforts. Finally, 486,700 of these high quality youth, or 4.3 percent of the total population, expressed a positive propensity towards the military. In sum, of every twenty-four 16-21 year-old males in the population, only one was available, of high quality, and interested in military service and thus considered recruitable.

This net number of recruitable youth would be further reduced had the medical and moral criteria for enlistment been applied to the YATS respondents. However, in the absence of data that relates these factors to the aptitude and education criteria among only the available population as defined in the YATS, the size of the reduction cannot be estimated. On the other hand, the number of recruitable youth would be enlarged had the actual aptitude and education enlistment criteria used by the Services been applied. The recruitable population would also be enlarged if the definition of "high quality" were relaxed to be more consistent with actual recruiting practice.

Clearly, as the definitions of qualified and available are modified and refined the size of the recruitable population changes. Thus, in an ideal world the data describing the population should be sufficiently detailed to accommodate the application of the many possible variations and permutations of the enlistment standards and definitions of availability. In addition, since recruiting actually occurs at the local level, estimates should be possible at geographical levels smaller than the national level.

Table 1.2

Distribution of the U.S. Population of 16-21 Year-old Males  
by YATS Eligibility, High School Graduation Status,  
Predicted AFQT Category Group, and Propensity\*

YATS Sampling Frame	High School Graduation Status	Predicted AFQT	Propensity
YATS Ineligibles** 3,322,900 (29.3)	YATS Ineligibles** 3,322,900 (29.3)	YATS Ineligibles** (29.3)	YATS Ineligibles** (29.3)
YATS Eligibles 8,020,100 (70.7)	High School Graduates and Seniors 3,858,100 (34.0)	Categories I-IIIa 2,439,000 (21.5)	Positive 486,700 (4.3)
		Categories IIIb-V 1,419,100 (12.5)	Negative 1,952,300 (17.2)
			Positive 490,400 (4.3)
		Negative 928,700 (8.2)	Negative 928,700 (8.2)
Total Population 11,343,000 (100.0)	Younger High School Students and Drop-outs 4,162,000 (36.7)	Categories I-IIIa 2,115,800 (18.7)	Positive 759,300 (6.7)
		Categories IIIb-V 2,046,200 (18.0)	Negative 1,356,500 (12.0)
			Positive 896,200 (7.9)
		Negative 1,150,000 (10.1)	Negative 1,150,000 (10.1)
Total Population 11,343,000 (100.0)	Total Population 11,343,000 (100.0)	Total Population (100.0)	Total Population (100.0)

\* Data presented are based on estimates of the population as of July 1, 1987 by the U.S. Bureau of the Census and the 1987 Youth Attitude Tracking Study sample of 5,642 males.

\*\* Males who had completed more than two years of college and currently enrolled in a four-year college or university; those currently serving in the military, including those in the Delayed Entry Program; those with prior military service; those currently serving or who had served in college ROTC, and those institutionalized or living in group quarters of ten or more people.

## G. Conclusion

This brief review of the status of the search for the QMA and the role of the YATS in its specification appears to indicate that obtaining the QMA is principally limited by the insurmountable difficulties of integrating the findings of the various currently available data sets into a single comprehensive set. Such a comprehensive data set would permit the determination of estimates of QMA that take all possible enlistment criteria and definitions of availability into consideration simultaneously. The existence of a single data set for a representative sample of American youth in which the availability, interest, and educational, aptitude, medical, and moral fitness of each individual in the sample were all described in detail would end the search for the military recruiting analysts' Holy Grail. With these data all the analyst need to do is calculate the QMA.

## 2. INTRODUCTION AND METHODOLOGY

Effective targeting of recruiting efforts requires that the Department of Defense understand the backgrounds, attitudes, and motivations of young men and women, and their intentions to serve in the military. The Youth Attitude Tracking Study (YATS) provided data on these issues for the active Services from 1975 to 1982. The Youth Attitude Tracking Study II (YATS II) has provided data on these issues for the active military and the Reserve Components since 1983.

This chapter provides an overview of the 1987 YATS II survey. It begins with a discussion of the study objectives and main features of the report, followed by the methodology used to gather the data. It concludes with a brief description of the characteristics of the survey population.

### A. 1987 YATS II Objectives

The conduct of the 1987 wave of YATS II was guided by a number of broad objectives:

- Assess current levels of propensity to enlist in the active military service and in the Reserve Component
- Assess trends in propensity to enlist in the military
- Measure attitudes and motivations of potential recruits, especially as these relate to enlistment propensity
- Determine the variables that predict propensity for the young market groups
- Provide an AFQT-based market segmentation analysis for young males and young females

The 1987 YATS II survey builds upon the 1983-1986 YATS II surveys to provide an integrated understanding of the factors affecting enlistment propensity of men and women.

### B. YATS II Basic Features and Report Organization

The underlying goal of YATS II is to use state-of-the-art technology and sophisticated analyses to make the data optimally useful. Some of the distinctive features incorporated into the surveys since 1983 are:

- An advanced Computer Assisted Telephone Interviewing (CATI) system for conducting interviews. This system handles screening and interviewing activities, issuing of phone numbers, and control of call-back appointments. It also controls skip patterns in the questionnaire, permits resolution of inconsistent responses for various key items, and creates a data set of high quality information.
- A sophisticated sampling design based on the Waksberg (1978) random digit dialing procedure. The design allocates the sample across 66 Military Entrance Processing Stations (MEPS) to meet DoD-specified precision requirements.
- The inclusion of older age groups. In 1983 an older male group of 22-29 years was included in the study. In 1986 this older male market group was redefined to include only 22-24 year olds. In 1986 a market group of 22-24 year old females (older females) was added.
- The inclusion of analyses targeted at specific market segments. From 1983-1985, these analyses used a classification of Recruiting Priority Groups (RPGs) to indicate recruit quality. This approach is considered for young males and young females. The 1985 wave of YATS included the RPG analysis and introduced an alternate market segmentation approach based on high school status and predicted Armed Forces Qualification Test (AFQT) scores. The predicted AFQT quality segmentation continued in 1986 and in the present report.
- The use of multivariate (regression) analyses to increase understanding of the contribution made by combinations of variables in predicting propensity for the young males and young females. Analyses build on prior efforts and highlight the role of recruit quality.
- A focus on propensity as a primary organizing theme. Assessing respondents' positive propensity (i.e., responses that individuals "definitely" or "probably" will join at least one of the Services) is a primary focus for the entire YATS series of surveys.
- A presentation of highlights of the reports' main findings. From 1983 to 1986, these highlights were presented in summaries at the end of each chapter. In the current report these highlights are presented in Chapter 12, the final chapter of the report.

The remainder of this chapter describes the methodology for the 1987 YATS II survey, and the balance of the report describes the findings for the study. Chapter 3 provides estimates of propensity to join the military for the current wave of the survey, and Chapter 4 examines trends in propensity over the YATS survey series. Chapter 5 describes propensity to enlist in the military in the context of competing military and civilian alternatives. Chapter 6 assesses the relationship of attitudes and



interpersonal influences to propensity. Chapter 7 examines the relationships between enlistment factors and active and Reserve propensity to enlist. Chapter 8 presents data regarding the degree of respondents' exposure to military advertising and perceptions of Service images. Chapter 9 examines active information-seeking efforts by respondents (e.g., mailing a post card, making a toll-free call for information, using computerized information system at school), and Chapter 10 reports on respondents' recruiter contact. Chapter 11 presents the results of multivariate regression analyses that identify predictors of positive propensity.

The results of a market segmentation analysis for young males and young females are integrated into these chapters. For these analyses, four major educational status groups are defined: High School Graduates; High School Seniors; Younger High School Students; and Non-completers. Based on a procedure developed by Orvis and Gahart (1987), the graduate and student groups are each dichotomized to reflect predicted standing on the Armed Forces Qualification Test (Categories I-IIIA, Categories IIIB-V). This yielded seven groups for which data are examined with regard to propensity and selected propensity-related issues, including actions taken toward enlistment, recruiter contact, and future intentions regarding education and occupations.

Supplementary tabulations by Active Service Propensity and Reserve Component Propensity are published in a companion volume (Bray, Cobb and Theisen, 1988). It provides the distributions of responses to individual questionnaire items as a function of market group and propensity.

### C. Methodology

This section provides an overview of the methodology used to obtain the data for the 1987 wave of YATS II. It includes a description of the sample design, data collection procedures, survey performance rates, and organization and content of the survey questionnaire.

#### 1. Sampling Design Overview

The 1987 YATS II survey was designed to obtain information from four market groups of interest to the military:

- Young Males aged 16-21
- Older Males aged 22-24

- Young Females aged 16-21
- Older Females aged 22-24.

To be eligible for inclusion in this study, individuals had to reside in the continental United States in households or noninstitutional group quarters with telephones. This includes households of traditional nuclear families, or households of up to 10 unrelated individuals living together who share the same phone (e.g., roommates in an apartment). Students in college dormitories were included if they had private phones in their rooms but were excluded if they were served only by a central hall phone. Consistent with past YATS surveys, eligible individuals could have no prior military service (other than high school ROTC) and could have completed no more than two years of college.

The sample size and allocation for each of the four markets were determined from DoD specifications of precision requirements for estimates of propensity (see Appendix A). Young males were the market of primary interest for YATS II and, accordingly, the sample size was determined by the number of households needed to meet the precision requirements specified for this market group. The number of households required for young males produced more eligible individuals than were needed to satisfy the precision requirements for the other three market groups, so subsamples of these groups were selected for interview.

The YATS II sampling design is based on the Mitofsky/Waksberg random digit dialing procedure (Waksberg, 1978). Under this procedure, telephone numbers are called in two stages to identify households. First-stage calls are made to randomly selected telephone exchanges. Exchanges yielding a household on the first number called are designated as clusters. In the second stage, numbers within these clusters are generated to find additional households. This approach is efficient because residential telephone numbers are frequently assigned to the same exchange. Thus, once an exchange containing a household (i.e., a cluster) is identified, numbers subsequently called in the same exchange are more likely to be assigned to households than numbers in other exchanges. Appendix A provides a detailed discussion of these procedures.

## 2. Data Collection Overview

The 1987 YATS II used a Computer Assisted Telephone Interviewing (CATI) system for all phases of the data collection. With this system, questionnaires for screening (eligibility determination), interviewing and verification are programmed, entered, and stored within the computer. Instructions and questionnaire items appear on the screen in the proper sequence, greatly simplifying the interviewer's task and allowing for the resolution of inconsistent, invalid, and incomplete responses as an ongoing part of the interview.

Data were collected in a two-phased approach during the 15-week period from July 26 to November 3, 1987. Phase 1 consisted of dialing to identify households, and Phase 2 consisted of screening households to identify members eligible for the study and then interviewing these individuals. Overall, 238,953 telephone numbers were called to identify 97,599 households. From these households, 13,346 eligibles for the study were identified and selected for interviews. Analyses for the study were based on 11,271 interviews. Further details about the data collection appear in Appendix B.

## 3. Survey Performance Rates

Performance rate information is important to assess the quality of survey field operations and the potential for nonresponse bias in the data. Table 2.1 presents two performance rates of interest: interview completion rates and overall response rates for each of the four market groups.

Table 2.1. Survey Performance Rates

Performance Rate	Young Males	Older Males	Young Females	Older Females
Interview Completion Rate	80.3	66.8	80.8	72.1
Overall Response Rate	77.1	64.1	77.4	69.1

Note: Tabled values are percentages.

As shown in Table 2.1 interview completion rates, computed as the percentage of completed interviews out of the total number of eligibles selected, were highest among young females and young males followed by

older females and older males. Final response rates, which were computed by multiplying the interview completion rates by the household screening rates, showed the same pattern noted for completion rates.

Numerous calls and attempts to overcome initial refusals were conducted to complete household screening for all sample numbers and to administer a questionnaire to all selected eligibles. A thorough effort was made to obtain high response rates within the given schedule constraints. Additional details about the computation of response rates appear in Appendix B.

#### 4. Survey Questionnaire

Data for the YATS II survey consist of responses to a questionnaire administered in a 30-minute computer assisted telephone interview. The 1987 questionnaire is identical to the 1986 instrument. Appendix E provides a cross-reference of items on the 1983-1987 questionnaires.

The 1987 survey questionnaire for YATS II appears in Appendix F and consists of four sections. Section A consists primarily of education and employment items. Sections B and C contain items about propensity toward the active Services and the Reserve Component, and general awareness about military pay, bonuses, educational benefits, requirements of the Reserve Component, and other selected issues. Section D contains items on advertising, recruiter contact, and respondent demographics.

In the 1987 YATS II questionnaire, responses to some questions routed the interviewers to other questions or led them to skip over one or more questions that did not pertain to a particular respondent. These skip patterns helped minimize respondent burden while obtaining the necessary information. For example, respondents who said they did not plan to attend school or a training program in the fall (Q407) were not asked about the kind of school in which they would be enrolled (Questions 408A-408C). The latter questions (called "filtered" questions) were asked only of the subset of individuals who were planning to attend school. Accordingly, fewer responded to filtered questionnaire items than to the questionnaire as a whole. Routing (skip) pattern instructions appear in the questionnaire (Appendix F).

Questions 554-563 apply only to active duty service and were asked of all respondents. Questions 571-582 apply only to service in the Reserve Components and were asked of all older males and all females but only half of the young males. The numbers of analysis interviews for these subsets of items and for the total study appear in Table 2.2.

Table 2.2. Question Sets and Sample Respondents

Tabulation Part	Question Sets	Young Males	Older Males	Young Females	Older Females
All respondents	403-525 601-717	5,642	1,103	3,448	1,078
Active only (Part 1)	554-563	5,642	1,103	3,448	1,078
Reserve only (Part 2)	571-582	2,840	1,103	3,448	1,078

Note: Item numbers 526-553, 564-570, and 583-600 were not used in the questionnaire. Table entries indicate the total number of analysis interviews for the question sets. Missing data and questionnaire routing (skip) patterns cause variation in the numbers responding to specific items.

#### D. Characteristics of Survey Population

Estimates of the sociodemographic characteristics of the 1987 survey population are presented in Table 2.3. This table and those in the following chapters often present two numbers in each cell. The first number is an estimate of the percentage of the population with the characteristics that define the cell. The second number, in parentheses, is the standard error of the estimate. Standard errors represent the degree of variation associated with taking observations on a sample rather than on every member of the population. A detailed discussion of standard errors and the construction of confidence intervals is presented in Appendix A.

Unweighted sample sizes indicating the number of interviews on which the estimates are based are presented for each of the tables. Estimates in the tables, however, are based on weighted data.

Table 2.3. Estimates of Sociodemographic Characteristics of Survey Population

Characteristic	Young Males (n=5,642)	Older Males (n=1,103)	Young Females (n=3,448)	Older Females (n=1,078)
<u>Age<sup>a</sup></u>				
16 (22)	25.7 (0.8)	33.7 (1.6)	26.7 (1.3)	32.7 (1.9)
17 (23)	26.1 (0.8)	34.8 (1.7)	22.6 (1.1)	34.1 (2.0)
18 (24)	17.7 (0.7)	31.5 (1.6)	15.1 (0.8)	33.3 (2.2)
19	13.1 (0.6)	-	14.6 (0.9)	-
20	9.2 (0.5)	-	10.3 (0.8)	-
21	8.1 (0.5)	-	10.7 (0.9)	-
<u>Race/Ethnicity</u>				
White	76.4 (0.8)	81.2 (1.3)	76.0 (1.1)	78.4 (2.1)
Black	10.9 (0.6)	9.0 (1.0)	11.2 (0.8)	9.7 (1.1)
Hispanic	8.9 (0.5)	8.0 (1.0)	10.5 (0.9)	9.8 (1.6)
Other	3.8 (0.4)	1.9 (0.5)	2.4 (0.3)	2.0 (1.4)
<u>Marital Status</u>				
Never married	97.1 (0.3)	65.4 (1.6)	87.9 (1.0)	37.0 (2.0)
Currently married	2.4 (0.2)	30.4 (1.6)	10.3 (0.9)	51.7 (2.1)
Other <sup>b</sup>	0.4 (0.1)	4.1 (0.7)	1.8 (0.4)	11.3 (1.5)
<u>Educational Status<sup>c</sup></u>				
Attend school	69.6 (0.8)	15.7 (1.2)	64.5 (1.3)	12.9 (1.3)
Not attend school	29.2 (0.8)	83.2 (1.3)	35.0 (1.3)	86.4 (1.3)
Don't know	1.2 (0.3)	1.1 (0.4)	0.5 (0.1)	0.7 (0.3)
<u>Years of Education Completed</u>				
Less than 10	9.3 (0.5)	5.5 (0.8)	6.2 (0.7)	4.8 (1.0)
10	25.1 (0.8)	4.0 (0.7)	23.7 (1.2)	3.8 (0.6)
11	28.6 (0.8)	8.1 (0.9)	27.0 (1.2)	6.4 (0.9)
12	27.6 (0.8)	65.1 (1.7)	32.0 (1.2)	60.3 (2.3)
Some vocational school	0.7 (0.1)	2.5 (0.5)	0.8 (0.2)	3.6 (0.7)
Some college	8.7 (0.5)	14.8 (1.2)	10.4 (0.8)	21.1 (2.3)
<u>Employment Status</u>				
Employed full-time	28.5 (0.8)	80.3 (1.4)	22.4 (1.1)	49.4 (2.1)
Employed part-time	32.2 (0.8)	7.9 (1.0)	33.2 (1.2)	15.4 (1.5)
Not employed, looking	20.1 (0.7)	8.7 (1.0)	21.5 (1.1)	9.8 (1.0)
Not employed, not looking	19.2 (0.8)	3.1 (0.6)	23.0 (1.2)	25.4 (2.1)

Note: Tabled values are column percentages with standard errors in parentheses. Percentage distributions may not sum to 100.0 due to rounding.

<sup>a</sup>Ages 22-24 apply to older males and older females.

<sup>b</sup>"Other" includes widowed, divorced, and separated.

<sup>c</sup>Data were collected during August, September, October, and November 1987. The question before October 1 asked about planned status for October; the question after October 1 asked about actual status.

Source: Questions 403, 404, 407, 416, 417, 713C, 714, 715.

As shown in Table 2.3, about one-half of both the young male and young female populations are ages 16 and 17. Decreasing percentages of eligible respondents appear as age increases from 18 to 21. Older males and older females show a more even distribution across years. Reflecting the general population, the majority of respondents interviewed are white, followed by Blacks and Hispanics. Other differences between the groups are primarily a function of age. Most young males (57 percent) and young females (88 percent), for example, have never been married, compared with about two-thirds of older males (65 percent) and one-third of the older females (37 percent). Approximately 65 to 70 percent of young males and females are currently in school compared with only 13-16 percent of older males and females. Fewer than half of the young males (37 percent) and young females (43 percent) completed 12 or more years of school compared with 82 percent of older males and 85 percent of older females. As expected, there is less employment among younger groups than among older groups. Sixty-one percent of young males and 56 percent of young females are employed either full time or part time, compared with 88 percent of the older males and 65 percent of the older females.

### 3. CURRENT ENLISTMENT PROPENSITY

The primary focus of the Youth Attitude Tracking Study is to assess the propensity of young people to enlist in the active military or Reserve Components. In this chapter, we first briefly discuss the definition and measurement of propensity. Then we examine the basic results relating to the likelihood of enlistment for the 1987 YATS II data for both the active military and the reserves. The major emphasis is on active military service.

#### A. Measurement of Propensity

"Propensity" is the self-reported likelihood that a respondent will enlist in the military. Propensity toward active military service has traditionally been measured by four questions assessing the likelihood of serving in each of the active Services: the Army (Q510 in the questionnaire), the Navy (Q513), the Marine Corps (Q512), and the Air Force (Q511).

These questions were asked with the following format:

Now, I'm going to read you a list of several things which young (men/women) your age might do in the next few years. For each one I read, please tell me how likely it is that you will be doing that.

How likely is it that you will be serving on active duty in the \_\_\_\_\_ (Army, Navy, Marine Corps, Air Force)? Would you say

Definitely,  
Probably,  
Probably not, or  
Definitely not?

For each of the Services, positive propensity is defined as having answered "definitely" or "probably"; negative propensity is defined as having answered "probably not," "definitely not," "don't know," or "refuse" to the question.

The four Service-specific propensity items also form the measure used most widely throughout the report, the Composite Active Propensity measure. Composite Active Propensity is defined as the most positive response given to any of the four questions assessing propensity to join the individual active duty Services. A respondent who indicates that he or she would



"probably enlist" in the Army, but "probably not enlist" in the Navy, the Air Force, or the Marine Corps, for example, is assigned a value of "probably enlist" on the Composite Active Propensity measure. Respondents with values of "definitely enlist" or "probably enlist" on the composite measure are considered to have "positive propensity." Respondents with values of "probably not," "definitely not," "don't know," or "refuse" on the composite measure are considered to have "negative propensity."

The 1987 YATS II survey similarly assessed Reserve propensity by answers to two questions--one about joining the National Guard (Q505) and the other about joining the Reserves (Q507). They were asked as follows:

How likely is it that you will be serving in the \_\_\_\_\_ (National Guard, Reserves)? Would you say

Definitely,  
Probably,  
Probably not, or  
Definitely not?

The answers to these two questions became the individual measures of propensity to join the National Guard and propensity to join the Reserves. In addition, a Composite Reserve Propensity measure was constructed from the answers to these two items in the same manner as the Composite Active Propensity measure.

In summary, propensity is examined most commonly using five measures for active duty--one for each of the individual Services and one composite measure--and three measures for the Reserve Component--one each for the Reserve and the National Guard and one composite measure. Additional measures of propensity are used occasionally. Two of these are unaided mentions of enlisting in the military (in response to Q438 about what the respondent might be doing for the next few years) and general expectation of serving in the military (any Service or component) in the next few years (Q503).

#### **B. Active and Reserve Propensity**

In this section we examine the 1987 propensity results. The initial discussion concerns composite propensity for the active Services, followed by propensity for each of the four Services. This format is repeated for

the Reserve Components and is followed by an examination of unaided mentions of interest in joining the military, where a distinction is made between mentions of any military service and active military service.

1. Composite Active and Service-Specific Propensity

Table 3.1 presents the percentage of each market group expressing positive propensity to serve in any of the four active Services (Composite Active Propensity) as well as positive propensity toward enlisting in each of the Services. Data showing the distribution of item responses appear in Appendix C (Table C.1). Clearly, young (16- to 21-year-old) males show the highest Composite Active Propensity (32.4 percent). Older males achieve approximately half this level (16.1 percent). Neither of the two female groups, however, shows even half of the young males' level (15.0 percent for young females and 4.7 percent for older females). In other words, young males are much more likely than either older males or young or older females to say that they may serve in at least one branch of the active military.

Table 3.1. Positive Propensity to Serve in the Active Military

Propensity Measures	Market			
	Young Males (n=5,642)	Older Males (n=1,103)	Young Females (n=3,448)	Older Females (n=1,078)
Composite Active Propensity <sup>a</sup>	32.4 (0.8)	16.1 (1.3)	15.0 (1.1)	4.7 (0.7)
Army	15.5 (0.7)	8.4 (1.0)	6.8 (0.8)	2.2 (0.5)
Navy	12.3 (0.6)	6.7 (0.9)	5.3 (0.8)	2.1 (0.5)
Marine Corps	11.4 (0.5)	5.7 (0.8)	3.6 (0.5)	1.5 (0.4)
Air Force	18.2 (0.7)	8.9 (1.0)	8.6 (0.8)	3.3 (0.6)

Note: Tabled values are cell percentages with standard errors in parentheses

<sup>a</sup>Propensity to serve in at least one active Service.

Source: Questions 510-513.

Table 3.1 also shows that the young males are twice as likely to say that they will be serving in any of the individual active Services in the next few years (between 11.4 percent and 18.2 percent) as are older males (between 5.7 percent and 8.9 percent), young females (between 3.6 percent and 8.6 percent), or older females (between 1.5 percent and 3.3 percent). The older females show the lowest Service-specific propensity levels.

Young males' positive propensity to serve in the Air Force is significantly higher (18.2 percent) than their propensity to serve in any of the other active Services (15.5 percent for the Army, 12.3 percent for the Navy and 11.4 percent for the Marine Corps). Their expressed propensity to serve in the Army, however, is also significantly higher than propensity for either the Navy or the Marine Corps. Propensity levels for the Navy and Marine Corps did not differ from each other. Young females showed a similar, although attenuated pattern, with propensity to join the Air Force (8.6 percent) higher than propensity to join either the Navy (5.3 percent) or the Marine Corps (3.6 percent), with the latter two not differing significantly. In addition, for young females, propensity to join the Army (6.8 percent) did not differ significantly from propensity to join either the Air Force or the Navy, but it was higher than propensity to join the Marine Corps. In general, older male and female propensity levels for the individual Services did not differ. However, propensity to join the Air Force was higher (8.9 percent and 3.3 percent, respectively) than propensity to join the Marine Corps (5.7 percent and 1.5 percent, respectively).

## 2. Propensity to Enlist in the National Guard and Reserves

Table 3.2 presents the percentage of each market group expressing positive propensity to serve in any of the Reserve Components (Composite Reserve Propensity) as well as the individual components of the Guard or Reserves. The distribution of item responses for these three propensity measures is shown in Appendix C (Table C.2). Table 3.2 shows that young males express significantly higher Composite Reserve Propensity (21.1 percent) than older males (13.9 percent), while both of these groups express significantly higher levels than young females (8.5 percent). Young females also express significantly higher levels than older females (3.7 percent).

Table 3.2. Positive Propensity to Serve in the Reserve Components

Propensity Measures	Market			
	Young Males (n=5,642)	Older Males (n=1,103)	Young Females (n=3,448)	Older Females (n=1,078)
Composite Reserve Propensity	21.1 (0.7)	13.9 (1.2)	8.5 (0.6)	3.7 (0.6)
<u>National Guard</u>	13.3 (0.6)	9.1 (1.0)	4.8 (0.5)	2.2 (0.5)
Army National Guard	7.5 (0.5)	5.6 (0.8)	2.9 (0.4)	1.6 (0.4)
Air National Guard	5.5 (0.5)	3.2 (0.6)	1.8 (0.3)	0.5 (0.2)
<u>Reserves</u>	16.7 (0.7)	10.5 (1.0)	7.2 (0.6)	3.3 (0.6)
Army Reserve	6.2 (0.4)	3.8 (0.6)	2.9 (0.4)	1.4 (0.3)
Navy Reserve	2.2 (0.3)	1.1 (0.3)	0.7 (0.1)	0.4 (0.2)
Marine Corps Reserve	2.1 (0.2)	1.2 (0.4)	0.8 (0.2)	0.1 (0.1)
Air Force Reserve	5.1 (0.4)	3.9 (0.7)	2.4 (0.3)	1.3 (0.4)
Coast Guard Reserve	0.8 (0.1)	0.1 (0.1)	0.3 (0.1)	0.0 ( ** )

Note: Tabled values are cell percentages with standard errors in parentheses.

\*\*Informative standard error not available.

Source: Questions 505-508.

Both young males and young females were more likely to say that they would be serving in the Reserves than in the National Guard: 16.7 percent versus 13.3 percent, respectively, for the young males; 7.2 percent versus 4.8 percent, respectively, for the young females. The older males and females did not differ with respect to propensity to serve in the Reserves or the Guard.

Finally, respondents who expressed positive propensity toward service in the National Guard or Reserves were asked to indicate the branch of the (appropriate) Reserve Component to which they referred. Among the Guard, the Army was mentioned more often than the Air National Guard. Among the various Reserves, the Army and the Air Force Reserve were most likely, and the Coast Guard least likely, to be mentioned.

### 3. Unaided Mentions of Interest in Serving in the Military

Another measure used to assess propensity to join the military is termed "unaided mentions" and refers to an answer volunteered without an

interviewer prompt. The unaided mention measure was obtained by the question:

Now, let's talk about your plans for the next few years. What do you think you might be doing?

An unaided mention was recorded when the respondent indicated his or her intention to join the military in general or one of the Services. After stating such an intention, the respondent was asked what Service he or she planned to join (where not already indicated) and whether the type of service would be active duty, the Reserves, or the National Guard.

Table 3.3 presents the percentage of each market group expressing unaided mentions of interest in serving in the military, both for mentions of joining any branch and for joining one of the active Services. Young males and young females show a small but significantly greater tendency to join the military in general than to join the active Services. Among young males, 9.2 percent said "any" military compared with 6.4 percent who specified the active military; among young females the parallel comparison was 2.0 percent versus 1.0 percent. The older market groups show very low interest in the military, as indicated by unaided mentions as well as by the absence of a difference between serving in any military versus the active military.

### C. Predicted AFQT Market Segmentation Approach

Technically sophisticated military equipment and systems require that an increasingly larger proportion of the force possess high aptitudes and educational levels. Enlisting high quality recruits, then, is a high priority for the Services. High quality recruits are defined as high school diploma graduates who score in Categories I-IIIA on the Armed Forces Qualification Test (AFQT). High school graduation and predicted score on the AFQT are examined to provide insights about recruiting difficulties and opportunities among target populations.

In this section, we describe a Predicted AFQT-category segmentation approach. The groups derived from this segmentation approach are used throughout this report to examine positive propensity toward the active Services and the Reserve Components. Other substantive issues using this approach are examined in later chapters.

Table 3.3. Unaided Mentions of Interest in Serving in the Military

Market	Type of Service	
	Any Military Service	Active Duty Service
Young Males	9.2 (0.5)	6.4 (0.5)
Older Males	1.7 (0.4)	1.0 (0.3)
Young Females	2.0 (0.2)	1.0 (0.2)
Older Females	0.5 (0.2)	0.3 (0.2)

Note: Tabled values are cell percentages with standard errors in parentheses. Estimates are based on interviews with 5,642 young males, 1,103 older males, 3,448 young females and 1078 older females.

Source: Questions 438-441.

The predicted AFQT approach was developed by Orvis and Gahart (1987) of The RAND Corporation. The goal of the segmentation analysis was to develop a series of equations to estimate the probability that any individual would obtain a score at or above the 50th percentile on the AFQT (Categories I-III A). The equations were developed using young male respondents from the 1976-1980 fall administrations of YATS who subsequently took the AFQT. The variables used to predict AFQT category included such objective information as age at survey, race, geographic region, father's education, number and type of high school math courses completed, approximate high school grades, current job and educational status, and other information such as general intention to enlist, recruiter contact, perceived ease of finding full-time employment, and having talked with one's parents about enlisting. The application of these equations to both young male and young female data resulted in the following seven groups based on educational status and AFQT-predicted scores.<sup>1</sup>

<sup>1/</sup> Note that each of the two AFQT-category subgroups is composed of the entire set of respondents who have achieved the level of educational attainment specified. For example, among male high school seniors, the data for 1,118 individuals were entered into the calculations for both Categories I-III A and IIIB-V. This was accomplished by using the probability that each individual would fall into Categories I-III A (High Wt.) for the first set of calculations, and then using the probability that that individual would fall into Categories IIIB-V (1-High Wt.) for the second set. In each case, this probability was used to weight the particular measure being examined (e.g., propensity, recruiter contact, most likely plans).

- High School Diploma Graduates - Category I-IIIA
- High School Diploma Graduates - Category IIIB-V
- High School Seniors - Category I-IIIA
- High School Seniors - Category IIIB-V
- Younger High School Students - Category I-IIIA
- Younger High School Students - Category IIIB-V
- Non-completers.

Non-completers consist of all respondents not currently in high school who do not have regular high school diplomas, including those with GEDs or ABE certificates. Non-completers were not further divided into AFQT groups because of their low recruiting priority.

The mean estimated probability of being in AFQT Categories I-IIIA among young males was .620 for high school graduates, .639 for high school seniors, and .518 for younger high school students. Among young females, the mean estimated probability of being in Categories I-IIIA was .572 for high school graduates, .589 for high school seniors and .518 for younger high school students.<sup>2</sup>

#### **D. Active Propensity and Predicted AFQT**

Tables 3.4 and 3.5 present active and Reserve positive propensity levels for the predicted AFQT groups of young males and young females, respectively. Two basic patterns of propensity are evident for both the

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<sup>2/</sup> The female YATS sample in the years measured was too small to develop meaningful equations. Thus, the models developed for the male respondents were used for the females as well. This may account in part for the lower probabilities of females scoring in Categories I-IIIA. Both male and female younger high school students had lower probabilities of scoring in AFQT Categories I-IIIA than seniors. This may be because the younger student group includes individuals with lower AFQT scores who will drop out of school before their senior year. The lower probability for graduates is most likely due to the exclusion of individuals in their third or fourth years of college from the YATS sample.

Table 3.4. Young Males' Positive Propensity for Military Service by AFQT Category

Positive Propensity Measure	Predicted AFQT Group							
	High School Graduates (n=1,947)				Younger High School Students (n=1,480)			
	Category		Category		Category		Category	
	I-IIIA	IIIB-V	I-IIIA	IIIB-V	I-IIIA	IIIB-V	Non-Completers (n=922)	Total (n=5,642)
<u>Active Propensity</u>								
Army	4.8	13.2	10.1	23.2	15.3	29.0	21.6	15.5
Navy	5.4	9.4	12.6	21.6	14.1	19.4	12.1	12.3
Marine Corps	4.2	7.6	9.5	17.7	12.5	23.3	12.2	11.4
Air Force	8.8	16.0	17.6	28.5	26.3	29.1	17.7	18.2
Composite Active Propensity	14.0	25.4	29.0	49.7	36.5	55.3	35.4	32.4
<u>Reserve Propensity</u>								
National Guard	5.9	13.8	10.3	19.9	13.0	22.3	15.2	13.3
Reserves	8.7	17.6	14.4	24.7	16.3	25.0	18.5	16.7
Composite Reserve Propensity	10.5	20.7	18.4	32.2	21.0	32.2	23.7	21.1

Note: Tabled values are column percentages of each category with positive propensity.

Source: Questions 505, 507, 510-513.



Table 3.5. Young Females' Positive Propensity for Military Service by AFQT Category

Positive Propensity Measure	Predicted AFQT Group								Total (n=3,448)
	High School Graduates (n=1,442)		High School Seniors (n=730)		Younger High School Students (n=756)		Non-Completers (n=520)		
	Category I-III	Category IIIB-V	Category I-III	Category IIIB-V	Category I-III	Category IIIB-V			
<u>Active Propensity</u>									
Army	1.5	4.9	5.2	11.5	9.5	15.5	7.7	6.8	
Navy	1.4	4.3	6.6	8.6	4.4	11.0	6.4	5.3	
Marine Corps	0.8	3.0	1.9	5.1	3.5	9.3	4.9	3.6	
Air Force	3.1	8.4	5.0	13.9	10.6	15.5	10.3	8.6	
Composite Active Propensity	4.4	12.8	12.6	24.0	19.1	30.7	16.2	15.0	
<u>Reserve Propensity</u>									
National Guard	1.3	4.2	3.0	7.3	4.8	11.9	5.6	4.8	
Reserves	2.6	7.9	4.4	11.8	7.4	16.7	6.6	7.2	
Composite Reserve Propensity	3.1	8.8	5.1	13.4	8.6	19.3	9.0	8.5	

Note: Tabled values are percentages of each category with positive propensity.

Source: Questions 505, 507, 510-513.

individual Services and Reserve Components and the calculated composite measures. First, positive propensity shows a strong linear relationship as a function of educational status. High School Graduates consistently express the lowest levels of propensity, High School Seniors the next highest levels, and Younger High School Students the highest levels of positive propensity. Second, positive propensity is clearly much lower among Category I-IIIA males than among Category IIIB-V males within each educational status group. The differences between Category I-IIIA and IIIB-V for Composite Active Propensity range from 11 to 21 percentage points. The differences for Composite Reserve Propensity range between 10 and 14 percentage points. However, the striking nature of these differences should be viewed within the context of the equation-building process for predicting AFQT category. Specifically, one of the variables in the equation is a combination of the respondent's response on the measure of general intention to be serving in the military in the next few years (Q503) and the "unaided mentions" measure of interest in the military (Q438). Both of these measures are moderately correlated with propensity.

The same patterns noted for young males are also evident for young females (Table 3.5). Again, there is a strong linear relationship of increasing propensity with decreasing educational status for both the active Services and Reserve Components. In addition, respondents in Category I-IIIA express much lower propensity levels than respondents in Category IIIB-V. Young females in Category I-IIIA showed Composite Positive Active Propensity levels between 8 and 12 percentage points lower than those in Category IIIB-V. The differences for positive Composite Reserve Propensity ranged from 6 to 11 percentage points. As noted for the young males, however, the derivation of the Predicted AFQT groups from the general intention and unaided mentions may account for some of this large difference.

#### **E. Demographic Profiles of Active Propensity Groups**

Determining whether propensity to join the military is related to specific sociodemographic characteristics could be extremely useful in understanding how best to tailor recruiting strategy and communications to potential enlistees. Tables 3.6 and 3.7 present summary data for the 1987

Table 3.6. Positive Composite Active Propensity for Selected Sociodemographic Characteristics and Educational Plans

Variable/Response	Market			
	Young Males (n=5,642)	Older Males (n=1,103)	Young Females (n=3,448)	Older Females (n=1,078)
<u>Age<sup>a</sup></u>				
16 (22)	43.5 (1.8)	18.3 (2.4)	22.5 (3.0)	5.9 (1.3)
17 (23)	36.9 (1.6)	16.8 (2.2)	16.4 (2.1)	4.9 (1.3)
18 (24)	28.7 (1.9)	12.8 (2.1)	13.5 (2.1)	3.4 (1.0)
19	23.2 (2.0)	-	9.3 (2.1)	-
20	23.4 (2.9)	-	9.1 (1.8)	-
21	15.6 (1.8)	-	8.7 (2.6)	-
<u>Race/Ethnicity</u>				
White	27.2 (0.9)	12.4 (1.3)	11.2 (1.3)	2.9 (0.6)
Black	51.8 (2.8)	29.9 (5.1)	32.4 (3.3)	18.6 (4.4)
Hispanic	47.3 (2.6)	38.5 (6.4)	23.5 (3.9)	5.7 (2.5)
Other	46.9 (6.2)	17.7 (8.3)	15.6 (4.0)	3.4 (4.1)
<u>Marital Status</u>				
Never married	32.8 (0.9)	17.4 (1.6)	15.7 (1.1)	7.2 (1.3)
Currently married	18.4 (3.7)	13.7 (2.2)	7.3 (4.8)	2.7 (0.7)
Other <sup>b</sup>	23.3 (9.2)	13.9 (7.8)	26.0 (11.8)	5.9 (2.8)
<u>Educational Plans/Status<sup>c</sup></u>				
Attend school	34.4 (1.0)	15.4 (3.1)	17.1 (1.5)	7.8 (2.5)
Not attend school	27.8 (1.5)	15.9 (1.4)	10.7 (1.7)	4.3 (0.7)
Don't know	26.6 (9.1)	36.1 (16.3)	37.1 (12.3)	0.0 ( ** )
<u>Years of Education Completed</u>				
Less than 10	51.4 (3.1)	31.1 (7.9)	39.8 (6.6)	0.0 ( ** )
10	41.3 (1.7)	23.9 (7.5)	19.1 (3.0)	0.0 ( ** )
11	36.1 (1.5)	26.7 (5.3)	17.3 (2.0)	9.1 (3.7)
12	21.3 (1.5)	16.1 (1.7)	8.7 (0.9)	4.5 (0.9)
Some vocational school	20.0 (7.2)	10.3 (5.8)	11.4 (6.4)	2.1 (2.1)
Some college	11.0 (1.8)	8.7 (2.5)	5.1 (1.3)	4.9 (1.6)
<u>Employment Status</u>				
Employed full time	23.9 (1.4)	14.4 (1.4)	9.3 (1.2)	4.0 (0.9)
Employed part time	33.5 (1.5)	30.5 (6.2)	12.7 (1.5)	6.4 (2.1)
Unemployed, looking	46.2 (1.8)	20.6 (5.2)	22.6 (3.0)	10.5 (3.3)
Unemployed, not looking	28.6 (1.9)	7.9 (4.6)	15.9 (3.0)	2.8 (1.1)

Note: Tabled values represent the percentages within each group showing positive Composite Active Propensity with standard errors in parentheses.

<sup>a</sup>Ages 22-24 apply to older males and older females.

<sup>b</sup>"Other" includes widowed, divorced, and separated.

<sup>c</sup>Data were collected during August, September, October and November, 1987. Questions prior to October 1 asked about planned status for October. Questions after October 1 asked about actual status.

\*\*Informative standard error not available.

Source: Questions 403, 404, 407, 416, 417, 510-513, 713C, 714, 715.

YATS II market groups on the relationship of sociodemographic characteristics to expressed positive propensity. These tables show the percentage of respondents expressing positive propensity within each level of the variable under examination (i.e., age, race/ethnicity, educational status) for each of the market groups. In addition, in Appendix C, Tables C.3a and C.3b present the distribution of each of the sociodemographic variables as a function of positive and negative propensity.

Inspection of Table 3.6 reveals that positive propensity increases as a function of being:

- young (especially among males);
- Black or, secondarily, nonwhite in general;
- unmarried;
- attending school (for younger groups only);
- of lower educational status (especially with 11 grades or fewer completed); and
- unemployed but looking for a job (for younger groups, and especially young males).

Table 3.7. Positive Composite Active Propensity  
by Race/Ethnicity and Age

Market/Age	Race/Ethnicity				Total
	White	Black	Hispanic	Other	
<u>Young Males</u>					
16-17	34.9 (1.3)	59.1 (3.9)	55.7 (3.6)	54.4 ( 6.7)	40.2 (1.2)
18-21	19.0 (1.1)	43.3 (3.8)	38.7 (3.8)	37.7 (11.3)	24.0 (1.1)
Total	27.2 (0.9)	51.8 (2.8)	47.3 (2.6)	46.9 ( 6.2)	32.4 (0.8)
<u>Young Females</u>					
16-17	16.6 (2.3)	34.1 (4.7)	26.1 (5.4)	24.0 (6.6)	19.8 (1.9)
18-21	5.9 (0.7)	30.3 (4.8)	22.0 (5.3)	6.9 (3.9)	10.4 (1.1)
Total	11.2 (1.3)	32.4 (3.3)	23.5 (3.9)	15.6 (4.0)	15.0 (1.1)

Note: Tabled values are cell percentages indicating positive active propensity with standard errors in parentheses. Estimates are based on interviews with 5,635 young males (4,323 white, 583 Black, 544 Hispanic, and 185 "other"); and 3,446 young females (2,651 white, 413 Black, 294 Hispanic, and 88 "other").

Source: Questions 403, 510-513, 714, 715.

These results are essentially the same as those found in previous years. As has been noted in previous years, these findings partially result from the fact that analyses examined each variable independently of all others regardless of the fact that age, educational status and marital status are highly interrelated. In other words, for any market group, as age increases there are increases in educational level as well as the proportion of individuals who are married.

Although similar patterns can be seen for both young groups, individual differences between categories of variables tend to be especially pronounced among the young males. Age is a particularly potent variable for the young males. Sixteen-year-olds are significantly more likely than 17-year-olds (43.5 percent versus 36.9 percent) to express positive propensity toward joining the military. Similarly, 18-year-olds show a significant decline (28.7 percent) from the 17-year-olds, as do the 19-year-olds (23.2 percent) from the 18-year-olds. Finally, although 19- and 20-year-olds express virtually identical levels of positive propensity (just over 23 percent), 21-year-olds demonstrate a further significant decline (15.6 percent). In general, 16-year-old males are over two and a half times as likely as 21-year-old males to express positive propensity.

Positive propensity declines across age for young females as well, but none of the age categories differs significantly from its adjacent category. Overall, however, 16-year-old females are two and a half times as likely to express positive propensity as their 21-year-old counterparts. In addition, although there is a pattern of decreasing positive propensity with increasing age among the older groups, none of the differences is statistically significant.

Race/ethnicity shows a strong relationship to propensity. Nonwhites are, overall, more likely than whites to express positive propensity. Among young males, Blacks are almost twice as likely to have positive propensity as are whites (51.8 percent versus 27.2 percent), while Hispanics are more than one and a half times as likely as whites to express positive propensity (47.3 percent). Black older males are 2.4 times more likely to show positive propensity than whites (29.9 percent versus 12.4 percent). Hispanic older males show an even greater discrepancy with 38.5 percent indicating positive propensity. This same pattern of greater propensity among Blacks and Hispanics is seen among young females, with only 11.2

percent of whites having positive propensity as compared with 32.4 percent of young Black females and 23.5 percent of young Hispanic females. Although older Hispanic females do not show greater positive propensity than their white counterparts, 18.6 percent of older Black females and only 2.9 percent of older white females show positive propensity, demonstrating a six-fold increase.

For all market groups, never having been married is associated with higher levels of propensity than being currently married. However, this relationship is significant only for young males and older females. In addition, as indicated above, the relationship of propensity and marriage may merely reflect the positive correlation of greater age with marriage.

Looking at propensity as a function of educational plans and status further illustrates the importance of age-related variables. Young males and young females who reported that they plan to be in school in the fall of 1987 have higher propensity (34.4 percent for the males; 17.1 percent for the females) than their counterparts who are not expecting to be in school (27.8 percent for males; 10.7 percent for females).

Similarly, increasing years of education completed are related to decreasing levels of positive propensity for the two young market groups, as was also the case with increasing age among these two groups. Among young males, the positive propensity of those having completed 10 years of education is 10 percentage points lower than the positive propensity of those with fewer than 10 years of education (41.3 percent versus 51.4 percent). Completion of 11 years of schooling represents a further significant decline to 36.1 percent, while having completed 12 years represents almost a 15-point decline to 21.3 percent. Although having completed some vocational school does not represent any difference from having 12 years of schooling, having had some college experience does result in a significant difference from having completed high school alone (11.0 percent versus 21.3 percent).

Respondents' employment status is also related to the expression of positive active propensity (Table 3.6). Among young males especially, it is clear that those who are currently unemployed but looking for a job express much higher propensity (46.2 percent) than either those who are unemployed but not looking for a job (28.6 percent) or those who are

employed either full time or part time (23.9 percent and 33.5 percent, respectively). A similar, although somewhat attenuated, pattern is also evident among young females, although the data show no differences between the two unemployed groups. This pattern is not at all apparent among the older males, where only those who are employed part time express significantly higher propensity (30.5 percent) than those in any of the other categories. Older females who are unemployed but seeking a job also, as do the younger males, express higher propensity (10.5 percent) than their counterparts who are unemployed but not looking for a job (2.8 percent). Although wanting a job may make joining the military more attractive, it is also possible that the relationships seen here are the result of a complex interaction of age, race, completed education, and educational plans.

Finally, in view of the clear effects of age and race/ethnicity on propensity, additional analyses (Table 3.7) examined the joint relationship between these two factors. As shown in the previous table, overall positive effects on propensity of being young and being nonwhite are evident. In addition, among 16- to 17-year old females, the only significant difference is between whites and Blacks, whereas for the 18- to 21-year-olds, whites express lower propensity than both Blacks and Hispanics. The young males do not demonstrate any interactive effects of age and race/ethnicity.

#### F. Demographic Profiles of Reserve Propensity Groups

Table 3.8 presents the percentages of respondents in each market group who express positive Reserve propensity as a function of various sociodemographic variables. Fewer general statements can be made about the relationship of these variables to positive Reserve propensity than were possible with positive active propensity. It appears that overall, however, positive Reserve propensity increases as a function of being:

- Black and, secondarily, Hispanic;
- unmarried (except among older males);
- of lower educational status (especially having completed 11 or fewer grades of school); and
- unemployed but looking for a job.

In addition, the last two statements do not apply to older females.

Table 3.8. Positive Composite Reserve Propensity for Selected Sociodemographic Characteristics and Educational Plans

Variable/Response	Market			
	Young Males (n=5,642)	Older Males (n=1,103)	Young Females (n=3,448)	Older Females (n=1,078)
<u>Age<sup>a</sup></u>				
16 (22)	25.5 (1.5)	14.2 (2.0)	11.0 (1.3)	3.5 (1.0)
17 (23)	23.3 (1.5)	13.8 (2.0)	8.2 (1.1)	4.5 (1.2)
18 (24)	20.5 (1.8)	13.7 (2.2)	9.1 (1.9)	3.1 (0.9)
19	15.3 (1.6)	-	6.7 (1.8)	-
20	19.1 (2.9)	-	7.7 (1.6)	-
21	13.2 (1.7)	-	5.4 (1.2)	-
<u>Race/Ethnicity</u>				
White	17.0 (0.7)	11.0 (1.3)	5.1 (0.5)	2.5 (0.5)
Black	38.4 (2.5)	30.6 (5.1)	24.3 (2.5)	12.8 (3.9)
Hispanic	29.4 (2.4)	25.1 (5.5)	16.8 (3.4)	4.9 (2.3)
Other	33.9 (6.7)	12.6 (7.0)	7.8 (2.8)	3.4 (4.1)
<u>Marital Status</u>				
Never married	21.4 (0.7)	14.2 (1.5)	9.2 (0.7)	5.3 (1.1)
Currently married	11.0 (2.6)	13.7 (2.3)	2.3 (1.1)	2.2 (0.7)
Other <sup>b</sup>	11.2 (5.3)	10.1 (7.6)	10.2 (7.3)	5.4 (2.7)
<u>Educational Plans/Status<sup>c</sup></u>				
Attend school	21.3 (0.9)	13.1 (3.0)	9.6 (0.8)	4.3 (1.8)
Not attend school	20.6 (1.4)	13.6 (1.3)	6.4 (0.9)	3.7 (0.7)
Don't know	19.0 (7.4)	44.7 (16.5)	17.9 (9.9)	0.0 ( ** )
<u>Years of Education Completed</u>				
Less than 10	31.0 (2.7)	27.9 (7.7)	21.1 (3.8)	0.0 ( ** )
10	25.0 (1.5)	16.7 (6.5)	10.4 (1.6)	0.0 ( ** )
11	23.3 (1.4)	23.0 (5.0)	8.5 (1.1)	6.1 (3.1)
12	16.9 (1.4)	14.4 (1.6)	4.7 (0.7)	4.1 (0.8)
Some vocational school	18.8 (6.9)	11.8 (6.7)	6.7 (4.7)	3.1 (3.1)
Some college	6.2 (1.3)	5.8 (2.2)	8.8 (2.2)	3.1 (1.2)
<u>Employment Status</u>				
Employed full time	18.2 (1.3)	12.0 (1.3)	5.6 (1.0)	3.1 (0.8)
Employed part time	19.7 (1.2)	20.9 (5.0)	7.6 (0.9)	5.3 (1.7)
Unemployed, looking	30.1 (1.6)	26.4 (5.6)	13.8 (1.6)	8.5 (3.0)
Unemployed, not looking	18.1 (1.8)	9.2 (5.2)	7.3 (1.5)	2.1 (1.0)

Note: Tabled values represent the percentages within each group showing positive Composite Active Propensity with standard errors in parentheses.

<sup>a</sup>Ages 22-24 apply to older males and older females.

<sup>b</sup>"Other" includes widowed, divorced, and separated.

<sup>c</sup>Data were collected during August, September, October and November, 1987. Questions prior to October 1 asked about planned status for October. Questions after October 1 asked about actual status.

\*\*Informative standard error not available.

Source: Questions 403, 404, 407, 416, 417, 505, 507, 713C, 714, 715.



It is interesting to note that age is not as strongly related to Reserve propensity as was the case with active propensity. In general, although there is a trend toward decreasing propensity with increasing age, at least among the younger market groups, none of the comparisons between adjacent age categories reaches statistical significance.

On the other hand, race/ethnicity is related to Reserve propensity as it was to active propensity. More specifically, Blacks are consistently more than twice as likely to express positive propensity as their white counterparts in all market groups. The relative increase for older males is three-fold (30.6 percent versus 11.0 percent), whereas for young males it is two-fold (38.4 percent versus 17.0 percent). The relationship is especially strong among the females: young Black females are almost five times as likely to express positive Reserve propensity as are young white females (24.3 percent versus 5.1 percent), and older Black females are six times more likely to do so than older white females (12.8 percent versus 2.5 percent). In addition, among the older males and young females, Hispanic respondents are about equally likely as Blacks to express positive Reserve propensity. Among young males, Hispanics are significantly less likely than Blacks to express positive Reserve propensity, but significantly more likely than whites to do so.

As was the case for active propensity, never having been married is associated with greater positive Reserve propensity than being currently married for all groups except older males. At least a two-fold increase is seen as a function of current and past single status.

The association between Reserve propensity and years of education is especially interesting in view of the lack of an age-Reserve propensity relationship. Among both young males and young females, those who completed 11 years of education are significantly more likely to express positive Reserve propensity than those who completed 12 years of education. In addition, for both groups of males, those who completed some college are significantly less likely to express positive Reserve propensity than those who completed high school (12 years of education). These data certainly suggest that education contributes independently of age toward the determination of propensity to join the Reserve Components.

Finally, for all except the older females, respondents who are unemployed but looking for a job are more likely to express positive Reserve propensity than respondents in any other employment categories. The other categories tend not to differ significantly from each other.

#### 4. TRENDS IN ENLISTMENT PROPENSITY

A central feature of the YATS survey is its ability to identify youth's changing interest in and attitudes toward the military early. This enables the military to adapt programs and policies to appeal to future recruits. This chapter examines the trends of young people's propensity to join the military. The most recent changes--those between 1986 and 1987--are presented first. Then, trends in active propensity over the many years of YATS administrations are investigated.

##### A. 1986-1987 Changes in Propensity

###### 1. The Market Group Perspective

Analyses show few changes between 1986 and 1987 in active and Reserve propensity and unaided mentions for the four market groups (Table 4.1). In fact, although most of the apparent changes in active propensity are in the direction of increased propensity, only one of the differences was statistically significant. Specifically, a larger percentage of young males expressed positive propensity toward joining the Air Force (18.2 percent) in 1987 than in 1986 (16 percent). Changes in Reserve propensity and unaided mentions were generally small and not statistically significant.

###### 2. The Predicted AFQT Group Perspective

Table 4.2 presents 1986 and 1987 data for active and Reserve propensity from the perspective of the Predicted AFQT groups. Despite the apparently large differences for category IIIB-V high school seniors in both active and Reserve propensity among the young males (5.5 and 6 percentage points, respectively) and in active propensity among the young females (5.6 percentage points), none of the 1986-1987 changes is statistically significant.

##### B. Trends in Positive Active Propensity

One of the advantages of YATS data is the ability to track trends across key items over time. Research methodology and questionnaire items must, of course, be comparable for trend data to be interpreted correctly.

Table 4.1. Positive Propensity to Serve in the Active Military and Reserve Components Among Young Males, Older Males, Young Females, and Older Females, 1986-1987

Propensity Measure	Market							
	Young Males				Young Females			
	1986	1987	Change	1986	1987	Change	1986	1987
Composite Active Propensity	32.0	32.4	+0.4	14.2	16.1	+1.9	12.8	15.0
Army	15.8	15.5	-0.3	7.9	8.4	+0.5	5.8	6.8
Navy	11.1	12.3	+1.2	5.6	6.7	+1.1	4.1	5.3
Marine Corps	11.2	11.4	+0.2	5.4	5.7	+0.3	3.3	3.6
Air Force	16.0	18.2	+2.2*	6.9	8.9	+2.0	8.0	8.6
Composite Reserve Propensity	20.0	21.1	+1.1	11.5	13.9	+2.4	7.6	8.5
Army National Guard	7.3	7.5	+0.2	5.5	5.8	+0.1	2.2	2.9
Air National Guard	4.7	5.5	+0.8	3.2	3.2	0.0	1.8	1.8
Army Reserve	5.8	6.2	+0.4	3.1	3.8	+0.7	2.1	2.9
Navy Reserve	2.0	2.2	+0.2	1.3	1.1	-0.2	0.8	0.7
Marine Corps Reserve	2.1	2.1	0.0	1.6	1.2	-0.4	0.3	0.8
Air Force Reserve	4.5	5.1	+0.6	2.2	3.9	+1.7	2.7	2.4
Coast Guard Reserve	0.9	0.8	-0.1	0.4	0.1	-0.3	0.2	0.3
Unaided Mentions								
Any Service	8.8	9.2	+0.4	1.2	1.7	+0.5	2.5	2.0
Active Service	6.2	6.4	+0.2	0.8	1.0	+0.2	1.5	1.0

Note: Tabled values are column percentages. Estimates for 1986 are based on interviews with 5,382 young males, 1,068 older males, 3,191 young females, and 1,102 older females. Estimates for 1987 are based on interviews with 5,642 young males, 1,103 older males, 3,448 young females, and 1,078 older females.

Source: Questions 438-441, 505-513.

\*1986-1987 comparisons were statistically significant at the 95 percent confidence level.

Table 4.2. Positive Propensity to Serve in the Active Military and Reserve Components by AFQT Category for Young Males and Young Females, 1986-1987

	Predicted AFQT Group							
	High School Graduates (n=1,947)		High School Seniors (n=1,242)		Younger High School Students (n=1,480)		Non-Completers (n=922)	Total (n=5,642)
	Category	Category	Category	Category	Category	Category		
	I-III A	IIIB-V	I-III A	IIIB-V	I-III A	IIIB-V		
<u>Young Males</u>								
Composite Active Propensity								
1986	13.9	25.7	27.6	44.2	35.3	58.0	38.7	32.0
1987	14.0	25.4	29.0	49.7	36.5	55.3	35.4	32.4
Change	+0.1	-0.3	+1.4	+5.5	+1.2	-2.7	-3.3	+0.4
Composite Reserve Propensity								
1986	10.1	18.9	14.6	26.2	19.9	33.7	20.3	20.0
1987	10.5	20.7	18.4	32.2	21.0	32.2	23.7	21.1
Change	+0.4	+1.8	+3.8	+6.0	+1.1	-1.5	-2.6	+1.1
<u>Young Females</u>								
Composite Active Propensity								
1986	5.5	10.9	8.7	18.4	17.7	29.2	12.8	12.8
1987	4.4	12.8	12.6	24.0	19.1	30.7	16.2	15.0
Change	-1.0	+1.9	+3.9	+5.6	+1.4	+1.5	+3.4	2.2
Composite Reserve Propensity								
1986	3.2	7.6	5.6	10.6	9.4	16.2	7.8	7.6
1987	3.1	8.8	5.1	13.4	8.6	19.3	9.0	8.5
Change	-0.1	+1.2	-0.5	+2.8	-0.8	+3.1	+1.2	+0.9

Note: Tabled values are percentages within each category showing positive propensity.

Source: Questions 505, 507, 510-513.

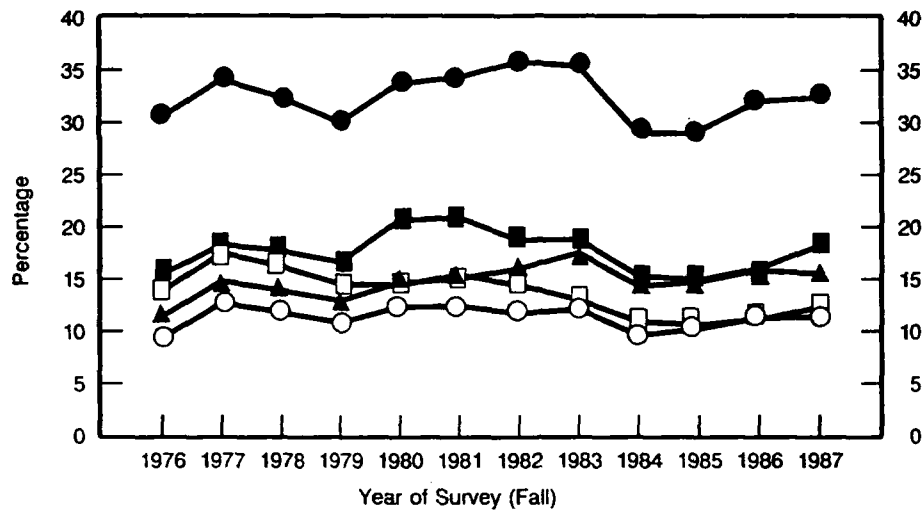
For the YATS surveys, key items such as propensity have remained constant across years, although there have been differences in the sampling methods, sampling strata, and weighting schemes. The effects of these changes on estimates made from data obtained before 1983 were analyzed in 1984, and the propensity data for the earlier years were adjusted for differences in sampling and weighting. This section of the report describes the reweighted estimates for positive propensity to join each Service and Composite Active Propensity across the series of YATS surveys.

#### **1. Young Male Propensity Trends**

Data for young males presented in Figure 4.1 show highly similar patterns for Composite Active Propensity and Service-specific propensities from 1976 through 1979, with an initial increase followed by a general downward trend. Composite Active Propensity increased from 1979 to 1982, leveled off in 1983, and significantly declined in 1984. In 1985, Composite Active Propensity remained at the 1984 level, and in 1986 showed a slight but nonsignificant increase. There was another small increase in 1987. Although this increase did not produce a propensity level different from that of the previous year (1986), it is significantly higher than both 1984 and 1985 levels.

Service-specific propensities generally increased from 1979 through 1981. From 1981 through 1986, however, the Services show distinct patterns. The Air Force shows an initial decline (1981-1982), a leveling off (1982-1983), and another decline (1983-1984). This was followed by another leveling off (1984-1986), and the 1987 increase. Propensity in 1987 was significantly higher than those of 1984 through 1986. The Army shows an increase between 1981 and 1983, followed by a decline (1984), and a leveling off (1985-1987). The Navy shows a steady decline from 1981 to 1984, a leveling off in 1985, and an increase in 1987 to produce a propensity level significantly different from that of 1985. The Marine Corps was fairly level until the general 1984 decline. Since then,

**Figure 4.1. Trends in Positive Propensity to Serve on Active Duty in Specific Services and Any Service for Young Males**



● Any Service	30.5	34.1	32.4	30.0	33.7	34.3	35.8	35.4	29.9	29.8	32.0	32.4
▲ Army	11.4	14.8	13.9	12.9	14.6	15.0	16.0	17.5	14.3	14.7	15.8	15.5
□ Navy	13.8	17.5	16.2	14.5	14.4	15.4	14.4	13.0	10.9	10.6	11.1	12.3
○ Marine Corps	9.3	12.7	11.8	10.8	12.3	12.4	11.7	12.1	9.6	10.2	11.2	11.4
■ Air Force	15.4	18.3	17.7	16.6	20.6	20.9	18.7	18.8	15.3	16.0	16.0	18.2

NOTE: Estimates prior to 1983 have been reweighted to be comparable to those from 1983 through 1987.

SOURCE: Questions 510-513

propensity has leveled off. Overall propensity, as well as propensity within each Service, has risen consistently in recent years, with the curves all turning up in 1986.

A shift in Service preference patterns is also evident in Figure 4.1. Since 1976, propensity for the Services shows a shift from four distinct preferences to three distinct preferences. During the '70s, preferences for all Services were clearly differentiated. From 1980 to 1986, preferences between the Air Force and the Army and between the Navy and the Marine Corps converged. The significant increase in Air Force propensity in 1987, however, suggests three preferences: Air Force, followed by Army, followed by Navy and Marines at the same level.

Another approach to evaluating the propensity level for a single year is to estimate the average over the series of surveys and contrast the particular year with the average. The 1976-1987 average for Composite Active Propensity is, as it was in 1986, 32.5 percent. The range of deviation around this mean is fairly narrow. The highest value is 35.8 percent (1982), and the lowest is 29.8 percent (1985). From 1980 to 1983, young males' Composite Active Propensity was above average. From 1984 to 1987, it has been below average. In 1987, however, it was below average only by .1 percentage point. The 12-year averages for Service-specific propensity are:

- 14.7 percent for the Army,
- 13.7 percent for the Navy,
- 11.3 percent for the Marine Corps, and
- 17.6 percent for the Air Force.

Propensity levels for both the Air Force and the Marine Corps were above average from 1980 through 1983, dropped to below average in 1984, stayed below average through 1986, and increased to above average (just barely, for the Marine Corps) in 1987. The Navy shows a similar pattern, with a slight drop to below average in 1983 (a year before the abrupt 1984 drop) and continuation below average through 1987. The Army propensity levels were at or above average from 1980 through 1983 and returned to above average levels fairly quickly following the 1984 decrease; in fact even this decrease had reduced Army propensity to only minimally below the 12-year average.



## 2. Young Female Propensity Trends

Figure 4.2 presents trend data for young females that are comparable to the data in Figure 4.1 for young males. Females were first included in the YATS series in 1980, so data are available for only eight years.

Comparison of Figures 4.1 and 4.2 shows that young females' positive propensities for each active Service and Composite Active Propensity are all lower than parallel propensities for young males. Young female Composite Active Propensity rose between 1980 and 1981, dropped in 1982 and 1983, rose again in 1984, remained essentially unchanged in 1985, and rose in 1986 and in 1987. The 1987 propensity level (15 percent) is significantly higher than the 1985 level (11.9 percent).

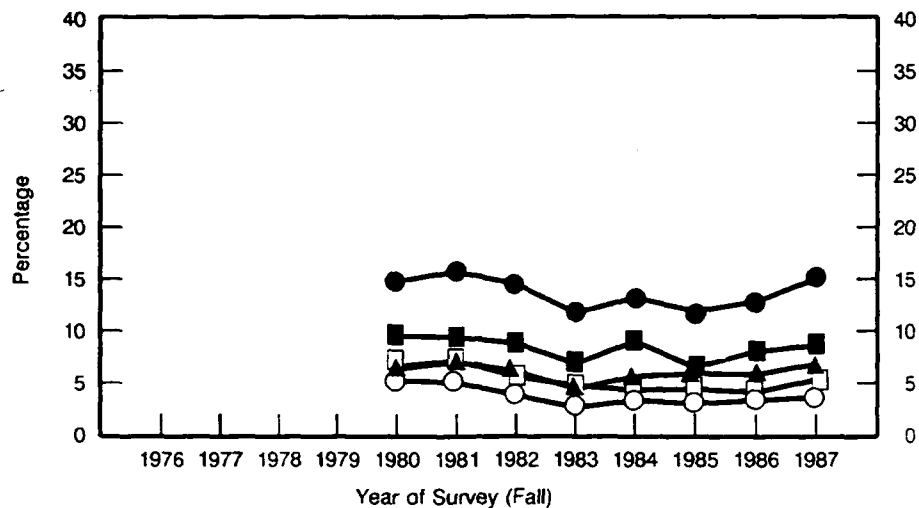
Service-specific propensities for young females showed no overall consistent pattern between 1980 and 1987. The Army propensity level and the composite measure rose between 1980 and 1981, followed by declines in 1982 and 1983. Army propensity increased in 1984, remained virtually unchanged in 1985 and 1986, and increased in 1987. In contrast, Navy propensity rose in 1981, fell in 1982 and 1983, stayed essentially unchanged at those low levels through 1986, and increased slightly in 1987. Propensity to join the Marine Corps steadily decreased from 1980 to 1983, showed a slight increase in 1984, and has since remained unchanged at well below the 1980 level. Finally, propensity for the Air Force is the most inconsistent pattern of all; propensity decreased between 1980 and 1983, recovered in 1984 almost to the 1980 level, dipped considerably in 1985, significantly increased again in 1986, and remained at about that level in 1987. Clearly, however, young females are most interested in the Air Force and least interested in the Marine Corps.

As with young males, variations in young females' propensity from the average propensity for the eight-year period were examined. The eight-year averages are:

- 13.7 percent for Composite Active Propensity,
- 6.0 percent for the Army,
- 5.3 percent for the Navy,
- 3.7 percent for the Marine Corps, and
- 8.3 percent for the Air Force.

Analyses of the deviation from the averages show a similar pattern for Composite Active Propensity and two of the four individual Services.

**Figure 4.2. Trends in Positive Propensity to Serve on Active Duty in Specific Services and Any Service for Young Females**



● Any Service	14.8	15.7	14.5	11.7	13.2	11.9	12.8	15.0
▲ Army	6.3	7.0	6.1	4.4	5.6	5.9	5.8	6.8
□ Navy	6.6	7.1	5.6	4.7	4.3	4.4	4.1	5.3
○ Marine Corps	5.2	5.0	3.8	2.6	3.3	3.0	3.3	3.6
■ Air Force	9.5	9.4	8.8	6.8	9.0	6.5	8.0	8.6

NOTE: Data for young females are available since 1980. Estimates prior to 1983 have been reweighted to be comparable to those from 1983 through 1987.

SOURCE: Questions 510-513

Specifically, the composite measure and propensity for all four Services show above average levels between 1980 and 1982, followed by below average levels in 1983. Since 1983, composite propensity as well as propensity for the Navy and the Marine Corps have remained at or below average. The Air Force shows a down-up-down-up pattern between 1983 and 1986, ending at just below its average propensity level in 1986 and increasing to just above average in 1987. Army propensity levels remained at or below average through 1986 but increased to above average in 1987.

### 3. Propensity Trends of the Older Groups

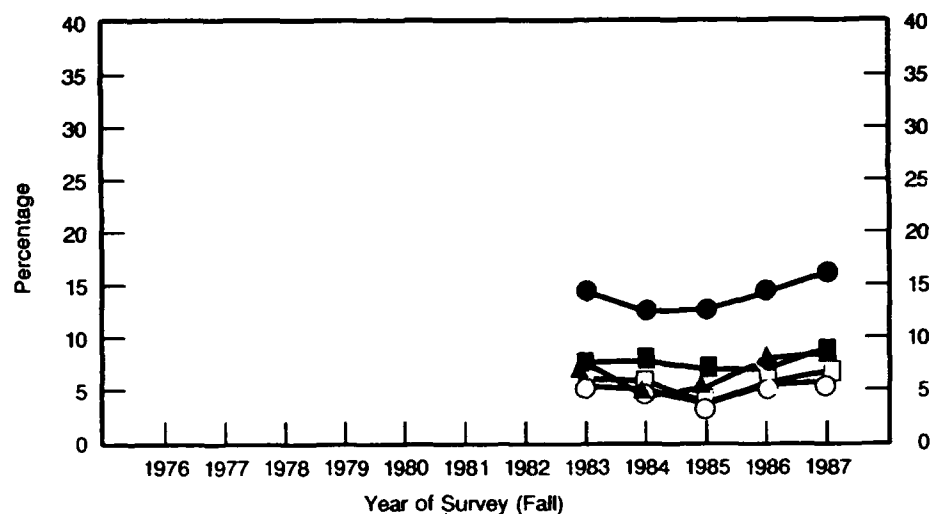
Figure 4.3 presents the available trend data for the older males. Only five years of composite and Service-specific propensity values (1983-1987) are available for older males. Because the definition of the older male sample was changed in 1986 to include only 22-24 year olds (rather than 22-29 year olds), the data presented for 1983 through 1985 were calculated for the corresponding 22-24 year old subset of respondents.

As shown in Figure 4.3, older males' Composite Active Propensity dropped from 1983 to 1984, remained unchanged in 1985, increased in 1986 to the 1983 level and increased again in 1987 to above all previous levels. Army propensity followed the same pattern as composite propensity. Propensity levels for the Navy and Marine Corps remained about the same in 1983 and 1984, decreased in 1985, and increased in 1986 and, again, in 1987 (the Marine Corps to a lesser extent than the Navy). Propensity to join the Air Force remained relatively stable from 1983 through 1986 and increased in 1987. Except for 1984, older males have consistently shown higher propensity levels for the Army and the Air Force than for the Navy and the Marine Corps.

Calculation of the five-year propensity averages for older males are:

- 13.9 percent for Composite Active Propensity;
- 6.7 percent for Army propensity;
- 5.6 percent for Navy propensity;
- 5.0 percent for Marine Corps propensity; and
- 7.6 percent for Air Force propensity.

**Figure 4.3. Trends in Positive Propensity to Serve on Active Duty in Specific Services and Any Service for Older Males**



● Any Service	14.3	12.4	12.6	14.2	16.1
▲ Army	7.5	4.3	5.2	7.9	8.4
□ Navy	6.0	5.8	3.7	5.6	6.7
○ Marine Corps	5.3	5.0	3.6	5.4	5.7
■ Air Force	7.6	7.7	6.9	6.9	8.9

NOTE: Data are for older males between the ages of 22 and 24 and are available since 1983. Estimates for 1983 through 1985 have been reanalyzed for the restricted age group to be comparable to the 1986 and 1987 data.

SOURCE: Questions 510-513

Propensity in 1985 for all Services was below average levels. Decreases were first evident in 1984 for composite and Army propensity. Propensity levels for the Army, Navy, and Marine Corps returned to above average levels in 1986, and did so for the Air Force in 1987.

Only two years of data are available for the older females because 1986 was the first year that they were included in the YATS series. Because at least three points are needed to make the discussion of trends meaningful, such examination must be postponed until 1988. Regardless, there are no 1986-1987 changes in either composite or Service-specific propensity among older females.

#### 4. Unaided Mention Trends

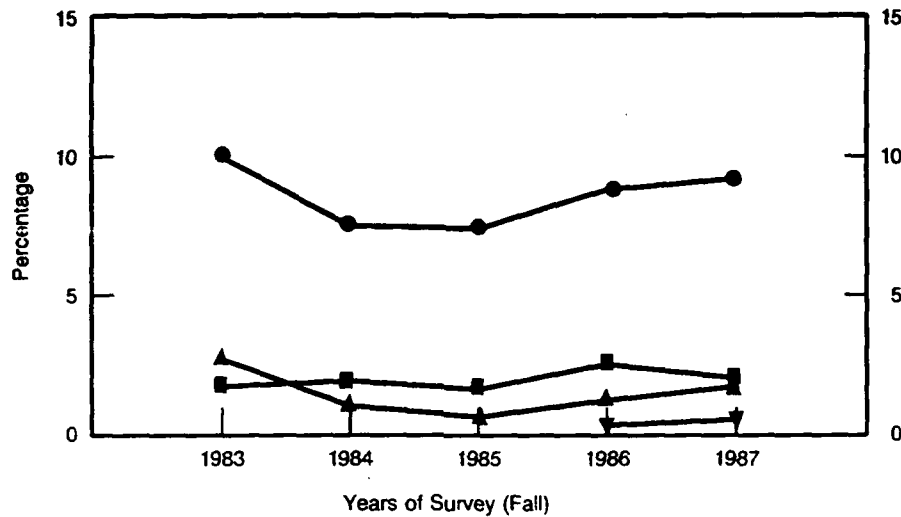
Figure 4.4 presents trend data since 1983 for unaided mentions of interest in serving in any branch of the military for the four market groups. Young males are clearly more likely than the other groups to spontaneously mention joining the military when asked about their plans for the next few years. The percentage of young males asserting this was highest in 1983, decreasing in 1984, leveling off in 1985, and slightly increasing in both 1986 and 1987--although still below the 1983 level. The percentage of unaided mentions among older males also decreased in 1984 and remained at approximately that level through 1987.

Young females show slightly higher percentages of unaided mentions than older males from 1984 through 1987. Young female levels have remained very similar since 1983. Finally, older females consistently have the lowest levels of unaided mentions among the four groups.

#### C. Positive Propensity and Unemployment Rates

In the context of social, political and cultural considerations, a military career may appear more attractive when a weak economy limits civilian career options. If this presumption is correct, then propensity will be low or declining when the economy is strong or strengthening (when unemployment rates are low or falling), and propensity will be high or rising when the economy is weak or weakening (unemployment rates are high or rising). The estimates of positive Composite Active Propensity were plotted with the comparable annual unemployment rates for young males and

**Figure 4.4. Trends in Unaided Mentions of Interest in Joining the Military**



● Young Males	10.0	7.5	7.4	8.8	9.2
▲ Older Males	2.7	1.0	0.6	1.2	1.7
■ Young Females	1.7	1.9	1.6	2.5	2.0
▼ Older Females	-	-	-	0.3	0.5

NOTE: Data from 1983-1985 from older males have been reanalyzed for the restricted group of ages 22-24 years for comparability with more recent data. Data for older females are not available before 1986.

SOURCE: Question 438.

young females aged 16-21 years to examine the relationship between positive active propensity and national unemployment rates.<sup>1</sup> Unemployment rates are from the U.S. Bureau of Labor Statistics for the calendar year of the corresponding YATS survey.

Figure 4.5 shows a positive relationship between the unemployment rate for young males aged 16 to 21 and their level of positive propensity to enlist in the military. Years of low or declining unemployment rates generally correspond with low or declining positive propensity, and years of high or increasing unemployment rates correspond with high or increasing positive propensity. The correlation between the two rates is .60.

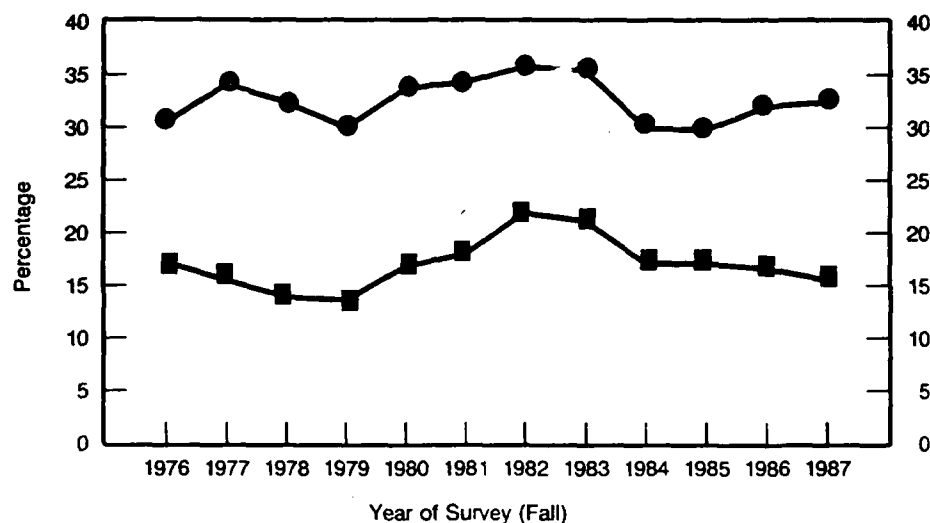
The pattern of changes in the respective rates has been close until very recently. Since 1976, the unemployment rate for young males increased in three years (1980, 1981 and 1982) and decreased in eight years (1977 through 1979, and 1983 through 1987). Positive propensity for young males increased in each of the three years in which their unemployment rates rose (as expected); however, positive propensity also rose in three of the eight years (including the last two) in which unemployment rates fell (contrary to expectations). These results suggest that, although there is a positive relationship between employment rates and positive propensity, important noneconomic factors shape propensity toward the military. These factors should be identified and carefully investigated.

Figure 4.6 compares annual unemployment rates and positive propensity for young females over the eight-year period from 1980 through 1987. Unlike the data for young males, the correlation is negative ( $r = -0.18$ ), indicating that, if anything, higher unemployment is associated with lower propensity to join the military. Young women may not see civilian employment and the military as logical alternatives.

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<sup>1/</sup> Analyses are not performed for older males and females because of the limited trend data available for them.

**Figure 4.5. Young Males' Annual Unemployment Rate and Positive Propensity for Any Active Duty Service, 1976-1987**



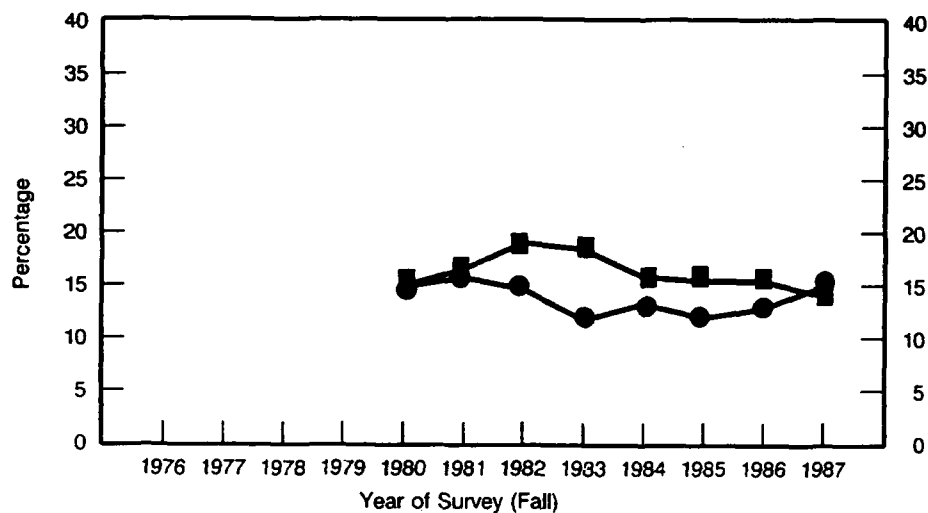
● Positive Propensity	30.5	34.1	32.4	30.0	33.7	34.3	35.8	35.4	29.9	29.8	32.0	32.4
■ Unemployment Rate	17.2	15.5	13.9	13.6	16.8	18.0	21.9	21.1	17.1	17.1	16.6	15.5

NOTE: Propensity estimates are based on surveys in the fall of each year. Estimates from before 1983 were reweighted to make them comparable to those from 1983 through 1987. Unemployment figures are annual estimates provided by the Bureau of Labor Statistics for the 16-21 year old males. Correlation of the two curves is .60.

SOURCE: Questions 510-513



**Figure 4.6. Young Females' Annual Unemployment Rate and Positive Propensity for Any Active Duty Service, 1980-1987**



● Positive Propensity	14.8	15.7	14.6	11.7	13.2	11.9	12.8	15.0
■ Unemployment Rate	14.9	16.5	19.0	18.4	15.8	15.4	15.4	14.0

NOTE: Propensity estimates are based on surveys in the fall of each year. Those prior to 1983 have been reweighted to be comparable to those from 1983 through 1987. Unemployment figures are annual estimates provided by the Bureau of Labor Statistics for the 16-21 year old females. Correlation of the two curves is -0.18.

SOURCE: Questions 510-513

## 5. INTENTIONS, ALTERNATIVES AND ACTIVE PROPENSITY

Military service is only one of the many activities or occupational opportunities open to young people. Individuals have various full-time and part-time activities from which to choose, from managing a home to attending school or working. Obviously then, young people must weigh the advantages and disadvantages of serving in the military against the alternatives.

This chapter compares propensity toward joining the military with expectations about alternative activities. First, respondents' likelihood of engaging in each of a number of alternative activities during the next few years is examined. Their most likely activity for one year hence (or, for the younger respondents, following high school) is then discussed. Attitudes regarding how difficult it is to find a job in one's community are compared with propensity for joining the military; and for those likely to enlist, the timing of their joining is discussed. Expectations for further education are then examined as a factor affecting the likelihood of military service. Finally, the specificity of propensity is described. All of these variables are discussed with regard to their relationship to active propensity.

### A. Alternative Plans for the Next Few Years

Choosing a particular military or civilian activity during the next few years does not preclude choosing another at another time. Thus, plans for further schooling do not necessarily rule out military service. In fact, the GI bill benefits package is aimed at individuals who expect to continue their education, either while serving or after serving.

Respondents were asked to estimate the likelihood that they would engage in a number of work- or school-related activities in the next few years. Some general observations are immediately apparent from the percentages of each market group answering "definitely" or "probably" to each activity listed in Table 5.1. The item rated with the highest percentage by young males, young females, and older females is going to college. Percentages ranged from 51 percent of the older males to 82 percent of the young females. Of secondary or equal importance to the male groups is going to vocational or technical school (49 percent of the young

Table 5.1. Likelihood of Engaging in Various Activities in the Next Few Years by Composite Active Propensity

Market Group/Activity <sup>a</sup>	Positive Propensity		Negative Propensity		Total	
<u>Young Males</u>						
Working as a laborer in construction	37.4	(1.4)	25.4	(1.0)	29.3	(0.8)
Working at a desk in a business office	33.8	(1.5)	32.8	(1.0)	33.1	(0.8)
Working as a salesman	29.0	(1.3)	29.3	(1.0)	29.2	(0.8)
Going to college	77.3	(1.2)	77.8	(0.9)	77.6	(0.7)
Going to vocational or technical school	58.1	(1.5)	44.4	(1.1)	48.8	(0.9)
<u>Older Males</u>						
Working as a laborer in construction	52.2	(4.4)	30.2	(1.7)	33.8	(1.6)
Working at a desk in a business office	34.5	(4.2)	29.7	(1.7)	30.5	(1.6)
Working as a salesman	36.3	(4.3)	26.2	(1.7)	27.8	(1.6)
Going to college	61.3	(4.4)	49.2	(1.9)	51.1	(1.7)
Going to vocational or technical school	70.9	(4.1)	48.9	(1.9)	52.4	(1.7)
<u>Young Females</u>						
Working as a waitress in a restaurant	24.7	(3.0)	16.6	(0.9)	17.6	(0.9)
Working at a desk in a business office	65.0	(4.1)	59.6	(1.3)	60.4	(1.3)
Working as a saleswoman	46.9	(4.1)	44.4	(1.4)	44.8	(1.3)
Going to college	85.0	(3.5)	81.6	(1.0)	82.1	(1.0)
Going to vocational or technical school	49.9	(4.2)	39.8	(1.3)	41.3	(1.3)
Being a full-time homemaker	26.6	(3.9)	23.3	(1.3)	23.7	(1.2)
<u>Older Females</u>						
Working as a waitress in a restaurant	15.7	(5.4)	12.7	(1.3)	12.8	(1.3)
Working at a desk in a business office	76.3	(6.4)	61.3	(2.1)	62.0	(2.1)
Working as a saleswoman	46.6	(7.7)	34.5	(2.0)	35.0	(2.0)
Going to college	81.3	(5.4)	57.4	(2.2)	58.5	(2.1)
Going to vocational or technical school	60.7	(7.4)	43.1	(2.2)	43.9	(2.2)
Being a full-time homemaker	38.1	(7.4)	44.7	(2.2)	44.3	(2.1)

Note: Tabled values are column percentages with standard errors in parentheses. Estimates are based on interviews with 5,637 young males (1,873 with positive propensity and 3,764 with negative propensity); 1,101 older males (172 with positive propensity and 928 with negative propensity); 3,448 young females (476 with positive propensity and 2,972 with negative propensity) and 1,078 older females (53 with positive propensity and 1,025 with negative propensity).

<sup>a</sup>Percentages of respondents who said they "definitely" or "probably" would be doing the activities listed.

Source: Questions 501-502, 504, 510-514, 515, 516.

males; 52 percent of the older males). For the females, working at a desk in a business office is either first or second in importance (60 percent of young females; 62 percent of older females). Males did not differ significantly in perceived likelihood of working as a laborer in construction, at a desk in a business office, or as a salesman, with about one-third or less of the males in each group reporting it likely that they will have such a job in the next few years. One fourth or fewer of the young females said that they were likely to be working as a waitress or to be a full-time homemaker, while about two-fifths said they would probably be a saleswoman or go to vocational or technical school. Older females were even more unlikely to expect to be waitresses and similarly likely to plan to be in sales or vocational/technical school but were much more likely than young females to expect to be a full-time homemaker (44 percent).

Finally, there were a number of significant differences between respondents expressing positive and those expressing negative propensity. Among the male groups, positive propensity individuals were more likely than their negative propensity counterparts to say they would probably or definitely be a construction laborer or go to vocational or technical school. Positive propensity females were more likely than negative propensity females to say that they would be going to college or vocational/technical school in the next few years. Older females' responses to the questions about working as a saleswoman and at a desk in a business office were parallel to the males' responses to the question about working as a laborer.

#### **B. Most Likely Activity for Next Year**

In addition to being asked to report how likely they were to engage in each of a number of activities over the next few years, respondents were asked to specify what they were most likely to be doing a year after the interview date (October, 1988) or after graduating from high school (for the respondents who would still be in high school in October of 1988). These results are first examined by market group and then by predicted AFQT groups.

### 1. Most Likely Activity by Market Group

Table 5.2 presents results of plans during the next year to attend school, work, serve in the military or be a homemaker. The pattern of results was highly similar for young males and young females. Almost half of the younger respondents--both male and female--expect to be going to school full time. From 25 to 29 percent planned to work full time, and between 10 and 14 percent planned to attend school part time. Seven percent of young males and fewer than 2 percent of young females planned to be serving in the military.

Older males and older females were less similar to each other in their responses than the younger respondents. Both older males and older females were most likely to say that they would be working full time in October 1988; however, the males were much more likely to say this (74 percent) than the females (50 percent). The older males' second and third choices were mentioned by fairly small percentages: 11 percent said they would be in school full time and 8 percent in school part time. A relatively large percentage of older females (16 percent) expected to be full-time homemakers. Ten percent planned to be in school part time and 10 percent in school full time. Fewer than one percent of both the older males and older females said that they would be serving in the military.

As was the case for alternative plans for the next few years, a number of significant differences are evident between respondents with positive and those with negative propensity. The most obvious and consistent difference is that the positive propensity respondents in all four market groups are more likely than their negative propensity counterparts to expect to be serving in the military in October 1988. These differences are 20 percentage points for young males, 11 points for young females, 5 points for older males, and 6 points for older females.

Respondents with positive propensity were significantly different from those with negative propensity in that:

Table 5.2. Most Likely Activity for Next Year (or After High School) by Composite Active Propensity

Most Likely Plan	Young Males			Older Males		
	Positive Propensity (n=1,874)	Negative Propensity (n=3,767)	Total (n=5,641)	Positive Propensity (n=172)	Negative Propensity (n=931)	Total (n=1,103)
Going to school full time	37.5 (1.5)	53.1 (1.1)	48.1 (0.9)	8.3 (2.3)	11.5 (1.2)	10.9 (1.1)
Going to school part time	10.6 (1.1)	9.3 (0.6)	9.7 (0.5)	13.9 (3.0)	7.0 (0.9)	8.1 (0.9)
Working full time	25.3 (1.2)	31.0 (1.0)	29.1 (0.8)	60.9 (4.4)	76.0 (1.6)	73.6 (1.5)
Working part time	2.5 (0.4)	3.7 (0.4)	3.3 (0.3)	3.8 (1.7)	2.2 (0.5)	2.4 (0.5)
Serving in the military	20.2 (1.2)	0.4 (0.2)	6.8 (0.4)	5.4 (2.0)	0.0 ( **)	0.9 (0.3)
Being a full-time homemaker	0.1 (0.1)	0.0 ( **)	0.0 ( **)	0.0 ( **)	0.0 ( **)	0.0 ( **)
Other	2.2 (0.6)	1.3 (0.3)	1.6 (0.3)	3.8 (1.7)	2.0 (0.5)	2.3 (0.5)

Most Likely Plan	Young Females			Older Females		
	Positive Propensity (n=476)	Negative Propensity (n=2,972)	Total (n=3,448)	Positive Propensity (n=53)	Negative Propensity (n=1,025)	Total (n=1,078)
Going to school full time	47.7 (4.2)	48.8 (1.4)	48.6 (1.3)	24.5 (6.5)	9.3 (1.1)	10.0 (1.1)
Going to school part time	15.5 (3.6)	14.1 (1.2)	14.3 (1.1)	9.4 (4.6)	9.5 (1.0)	9.5 (1.0)
Working full time	18.4 (2.3)	26.1 (1.2)	24.9 (1.1)	47.0 (7.6)	50.4 (2.2)	50.2 (2.1)
Working part time	4.8 (1.8)	5.3 (0.6)	5.2 (0.6)	11.0 (5.3)	7.9 (1.1)	8.1 (1.1)
Serving in the military	10.7 (1.6)	0.1 (0.1)	1.7 (0.2)	5.8 (3.3)	0.0 ( **)	0.3 (0.2)
Being a full-time homemaker	0.5 (0.3)	3.5 (0.4)	3.0 (0.3)	0.0 ( **)	17.2 (1.6)	16.4 (1.5)
Other	1.4 (0.7)	1.4 (0.2)	1.4 (0.2)	2.3 (2.2)	1.8 (0.4)	1.8 (0.4)

Note: Tabled values are column percentages with standard errors in parentheses. Respondents who had completed 11 years or less of school and were less than 19 years old were asked what they most likely would be doing after high school. All others were asked what they most likely would be doing in the fall a year after the interview, i.e., October 1988.

\*\*Informative standard error not available.

Source: Questions 510-513, 517.

- both young and older positive propensity males and young females were less likely to anticipate working full time;
- positive propensity males were less likely to anticipate going to school full time, whereas older positive propensity females were more likely to anticipate going to school full time; and
- both young and older positive propensity females were less likely to expect to be full-time homemakers--this is especially true for the older females (18 percent with negative propensity versus none with positive propensity).

## 2. Most Likely Plan and Predicted AFQT

Up to this point, the discussion has focused on descriptions of how the market segmentation groups differ with respect to their propensity to enlist in the active Services and their propensity for various alternative occupational choices. Initially it might be thought that young people have different plans because they have different abilities and are at different stages in their educations. Most already have expectations about what they are most likely to be doing in the immediate future. The next step is to look at young males' and young females' most likely plans for the next year (or following high school) as a function of their educational status and Predicted AFQT category.

Table 5.3 presents, for the male groups, the results of asking what their most likely plans were for next year (or after high school for respondents continuing high school in October 1988). These results reveal some interesting differences between both educational status groups and Predicted AFQT groups.

Overall, seniors and younger high school students are all much more likely to expect to be going to school full time than are High School Graduates (more than one-half versus about two-fifths). In contrast, High School Graduates are more likely to expect to be working full time (almost two-fifths) than are either group of high school students (less than one-fifth). Finally, the Graduates are also less likely to anticipate being in military service than are high school students. The results of these comparisons should not be surprising, especially with regard to expectations about full-time work and school attendance, because Graduates who enlisted in the military following graduation were excluded from the YATS sample.

Table 5.3. Young Males' Most Likely Plans for Next Year (or After High School) by AFQT Category

Most Likely Plans	Predicted AFQT Group						Total (n=5,641)	
	High School Graduates (n=1,947)		High School Seniors (n=1,243)		Younger High School Students (n=1,479)			
	Category	Category	Category	Category	Category	Category		
	I-III A	IIIB-V	I-III A	IIIB-V	I-III A	IIIB-V		
Going to school full time	56.2	32.1	67.2	44.3	64.2	42.0	27.6	48.1
Going to school part time	8.9	12.8	8.7	10.9	7.3	11.1	9.8	9.7
Working full time	29.9	44.8	12.6	21.0	13.0	23.0	50.9	29.1
Working part time	2.4	3.3	4.2	5.2	3.6	3.2	2.7	3.3
Serving in the military	0.6	3.2	5.6	15.3	8.8	17.0	5.3	6.8

Note: Tabled values are column percentages.

Source: Question 517.



Large differences are also noted as a function of Predicted AFQT group. Specifically, regardless of educational status, young males in Category I-IIIA are much more likely--by 22 to 24 percentage points--to anticipate going to school full time than are those in Category IIIB-V. On the other hand, Category IIIB-V males are more likely than those in Category I-IIIA to expect to be working full time; the differences range from 8 to 15 percentage points. Category IIIB-V males are also more likely to anticipate serving in the military than those in Category I-IIIA, by 2 to 10 percentage points. These results suggest, especially for the Graduates and Seniors, that the military is competing strongly with full-time school attendance for Category I-IIIA young males and with the full-time labor market for Category IIIB-V young males. This is less true for the Younger High School Students.

Data for young females' most likely activity in one year, parallel to those discussed above for the young males, are presented in Table 5.4. As was the case for the young males, female high school students, regardless of whether they are seniors or younger high school students, are much more likely to expect to be going to school full time (between three-fifths and two-thirds of these groups) than are High School Graduates (about two-fifths). Only one-quarter of the young female Non-completers--nearly the same proportion as comparable young males--have this expectation. High School Graduates, on the other hand, are much more likely to expect to be working full time than are high school students: one-third versus less than one-sixth, respectively. Graduates are less likely to expect to be serving in the military than either of the two high school groups. In none of these groups, however, is the percentage expecting to enlist in the immediate future higher than 5 percent.

Regardless of educational status, Category I-IIIA females are more likely than their IIIB-V counterparts to expect to be going to school full time; the differences range from 14 to 21 percentage points. And, as was the case for the males, Category I-IIIA females are less likely to expect to be working full time than those in Category IIIB-V (by between 4 and 11 percentage points). Finally, both High School Seniors and Younger High School Students in Category IIIB-V were more likely to expect to be serving in the military than were those in Category I-IIIA. The patterns shown by the young females are consistent with the conclusions drawn from the young male data.

Table 5.4. Young Females' Most Likely Plans for Next Year (or After High School) by AFQT Category

Most Likely Plans	Predicted AFQT Group						Total (n=3,448)	
	High School Graduates (n=1,442)		High School Seniors (n=730)		Younger High School Students (n=758)			
	Category	Category	Category	Category	Category	Category		
	I-III A	IIIB-V	I-III A	IIIB-V	I-III A	IIIB-V		
Going to school full time	48.0	33.8	71.4	49.6	74.1	54.6	27.4	48.6
Going to school part time	10.2	13.3	14.1	16.5	9.0	13.9	23.6	14.3
Working full time	32.8	37.4	7.6	19.0	9.5	17.2	32.0	24.9
Working part time	4.0	6.7	3.2	5.3	3.9	6.1	7.2	5.2
Serving in the military	0.3	1.3	1.0	4.0	2.1	5.3	0.8	1.7

Note: Tabled values are column percentages.

Source: Question 517.

Table 5.5 presents propensity levels for young males as a function of educational status, Predicted AFQT, and most likely plans. As expected, virtually all those who expect to be serving in the military have positive propensity. Propensity tends to decrease as a function of educational status for other categories of "most likely plans," especially for those planning to go to school full time. For those expecting to work full time, both high school groups look similar.

Among High School Graduates, those who plan to be in school part time have the highest propensity. Among Graduates, Category IIIB-V males were also more positive than comparable I-IIIA males who were planning to be in school or working full time. Among High School Seniors, the Category IIIB-V males expecting to be in school either part time or full time also show higher propensity than their Category I-IIIA counterparts.

Taken together, the results presented in Tables 5.3 and 5.5 support the notion that the senior year is a natural enlistment decision point and that the latter part of the junior year of high school is an important time for recruiting efforts.

Table 5.6 presents propensity data for young females by educational status, Predicted AFQT, and most likely plans. Overall, Younger High School Students and Seniors show higher levels of positive propensity than Graduates. Propensity differed as a function of Predicted AFQT, regardless of most likely plans. In general, the tendency for Category IIIB-V females to be more positive than those in Category I-IIIA is apparent, but large standard errors make it difficult to detect statistically significant differences. Most of the young females expecting to serve in the military expressed positive propensity; this is parallel to the pattern displayed by the young males.

### C. Perceived Difficulty of Finding a Full-Time Job

Some hypothesize that young people's interest in the military is partially a function of the difficulty they perceive in getting another job. This notion suggests that individuals who believe that finding a full-time job is difficult should show greater interest in military service than those who do not. Data about the difficulty of finding a full-time job in one's community as a function of propensity are presented in Table 5.7. Overall, the largest percentages of respondents (37-43 percent) feel that finding a full-time job in their community is somewhat difficult.

Table 5.5. Young Males' Positive Propensity by Most Likely Plans and AFQT Category

Most Likely Plans	Predicted AFQT Group						
	High School Graduates (n=1,947)		High School Seniors (n=1,213)		Younger High School Students (n=1479)		Total (n=5,641)
	Category I-III	Category IIII-V	Category I-III	Category IIII-V	Category I-III	Category IIII-V	
	Category I-III	Category IIII-V	Category I-III	Category IIII-V	Category I-III	Category IIII-V	
Going to school full time	14.1	22.9	23.1	38.6	25.9	44.0	26.3
Going to school part time	18.6	38.0	30.8	43.8	35.6	50.1	35.5
Working full time	11.1	17.4	34.9	48.3	45.7	48.7	28.1
Working part time	8.0	12.8	23.6	29.9	24.7	37.8	24.2
Serving in the military	100.0	100.0	88.0	94.9	98.1	97.2	96.2

Note: Tabled values represent percentages within each group showing positive active propensity.

Source: Questions 510-513, 517.

Table 5.6. Young Females' Positive Propensity by Most Likely Plans and AFQT Category

Most Likely Plans	Predicted AFQT Group						
	High School Graduates (n=1,442)		High School Seniors (n=730)		Younger High School Students (n=756)		Total (n=3,448)
	Category I-IIIA	Category IIIB-V	Category I-IIIA	Category IIIB-V	Category I-IIIA	Category IIIB-V	
Going to school full time	4.8	12.8	12.0	21.6	17.8	29.2	15.8
Going to school part time	2.1	10.5	13.6	24.4	14.4	27.2	22.0
Working full time	3.8	12.4	11.9	19.1	16.4	24.3	11.6
Working part time	5.0	7.1	10.5	24.8	17.5	11.9	22.7
Serving in the military	100.0	100.0	88.6	96.6	96.0	93.1	100.0
							96.5

Note: Tabled values represent the percentages within each group showing positive active propensity.

Source: Questions 510-513, 517.

Table 5.7. Perceptions of Difficulty of Finding a Full-Time Job in the Community

Perception of Difficulty	Young Males			Older Males		
	Positive Propensity (n=1,858)	Negative Propensity (n=3,727)	Total (n=5,585)	Positive Propensity (n=171)	Negative Propensity (n=919)	Total (n=1,090)
Almost impossible	12.3 (0.9)	8.7 (0.7)	9.9 (0.6)	14.4 (3.0)	7.5 (0.9)	9.6 (0.9)
Very difficult	24.1 (1.3)	18.2 (0.8)	20.1 (0.7)	19.6 (3.6)	17.6 (1.5)	18.0 (1.4)
Somewhat difficult	41.1 (1.5)	43.8 (1.1)	43.0 (0.9)	35.3 (4.3)	37.1 (1.8)	36.8 (1.7)
Not at all difficult	22.5 (1.3)	29.3 (1.0)	27.1 (0.8)	30.6 (4.1)	37.8 (1.8)	36.6 (1.7)

Perception of Difficulty	Young Females			Older Females		
	Positive Propensity (n=474)	Negative Propensity (n=2,933)	Total (n=3,407)	Positive Propensity (n=53)	Negative Propensity (n=1,010)	Total (n=1,063)
Almost impossible	14.4 (2.4)	9.1 (0.8)	9.9 (0.7)	12.3 (5.1)	7.3 (0.9)	7.5 (0.9)
Very difficult	30.3 (4.2)	22.0 (1.2)	23.2 (1.2)	24.9 (6.4)	20.3 (2.2)	20.5 (2.2)
Somewhat difficult	34.8 (4.1)	44.3 (1.4)	43.0 (1.3)	36.1 (7.2)	40.3 (2.2)	40.1 (2.1)
Not at all difficult	20.5 (2.8)	24.6 (1.2)	24.0 (1.1)	26.8 (7.1)	32.1 (1.9)	31.9 (1.8)

Note: Tabled values are column percentages with standard errors in parentheses.

Source: Question 436.

Between a quarter and a third of the respondents assert that finding a full-time job is either very difficult or almost impossible; these respondents may be most open to options other than employment in the civilian labor market. Respondents with positive propensity are more likely than those with negative propensity to say that finding a job is almost impossible and less likely to say that finding a job is not at all difficult. Thus, perceptions of difficulty in locating a full-time job are related to the expression of interest in joining the military.

Perceptions of the degree of difficulty of finding a full-time job in the community as a function of educational status and Predicted AFQT are presented for both young males and young females in Table 5.8. There were no significant differences in perceptions about getting a job across either educational status or Predicted AFQT. Graduates perceived slightly less difficulty than did students, however, and those in Category IIIB-V saw slightly more difficulty than those in Category I-IIIA.

#### D. Time Period in Which Enlistment Is Likely to Occur

Those respondents indicating positive propensity toward any of the active Services were asked when they might join. The most striking finding in Table 5.9 is that approximately half of the queried individuals replied that if they were to join, they would not do so for more than two years. The actual percentages saying this ranged from 46 percent of the older males to 57 percent of the young females. Many of the young males and young females, of course, are likely to be in high school for another one to two years; yet, it is notable that one-fifth to one-fourth of the positive propensity respondents said that they would join in a year or less. These data, however, apply to relatively few respondents.

#### E. Expectations for Further Education

Young people's most likely plans for the future are related to propensity, educational status, and Predicted AFQT. Are their plans also related to the anticipation of further education at some point in the future? Anticipated further education has been shown to be an effective predictor, both alone and in conjunction with actual AFQT score, of enlistment behavior among high school senior and graduate young males (Hosek and Peterson, 1985).

Table 5.8. Young Males' and Young Females' Perceptions of Difficulty of Finding a Full-Time Job in the Community by AFQT Category

Level of Difficulty	Predicted AFQT Group								Non-Completers (n = 985)	Total (n = 5,583)
	High School Graduates (n=1,928)		High School Seniors (n=1,233)		Younger High School Students (n=1,461)					
	Category	Category	Category	Category	Category	Category	Category	Category		
	I-III A	IIIB-V	I-III A	IIIB-V	I-III A	IIIB-V	I-III A	IIIB-V		
<u>Young Males</u>										
Almost impossible	7.3	9.0	7.5	11.4	10.1	12.8	12.6	9.9		
Very difficult	17.1	18.5	18.4	23.2	22.6	24.6	19.7	20.1		
Somewhat difficult	41.6	43.2	45.3	41.5	44.4	42.3	42.6	43.0		
Not at all difficult	34.1	29.3	28.8	24.0	22.9	20.4	25.2	27.1		
<u>Young Females</u>										
Almost impossible	7.3	9.0	7.5	11.4	10.1	12.8	12.6	9.9		
Very difficult	17.1	18.5	18.4	23.2	22.6	24.6	19.7	23.2		
Somewhat difficult	41.6	43.2	45.3	41.5	44.4	42.3	42.6	43.0		
Not at all difficult	34.1	29.3	28.8	24.0	22.9	20.4	25.2	24.0		

Note: Tabled values are column percentages.

Source: Question 436.



Table 5.9. Time Period in Which Respondent Would Join Military

Response	Market			
	Young Males (n=1,867)	Older Males (n=170)	Young Females (n=476)	Older Females (n=53)
Within 6 months	6.6 (0.7)	6.0 (1.9)	6.1 (1.3)	13.3 (5.5)
Between 6 months and 1 year	18.6 (1.3)	16.6 (3.3)	12.8 (1.8)	9.8 (3.8)
More than 1 year but less than 2 years	26.5 (1.3)	31.6 (4.3)	24.5 (2.7)	30.6 (6.8)
More than 2 years	48.3 (1.5)	45.8 (4.5)	56.6 (3.8)	46.2 (7.6)

Note: Tabled values are column percentages with standard errors in parentheses. Data apply only to individuals who indicated that they probably or definitely planned to join at least one of the active Services.

Source: Questions 510-513, 521.

Table 5.10 shows the percentages of respondents who want or do not want more education and who express positive propensity toward joining the military. If a young person does not want more education, military service might be more attractive as a considered alternative. Surprisingly, however, respondents who expect more education are more likely to express positive active propensity than are respondents who anticipate no more education. This finding holds for all market groups, though the difference is not statistically significant for young males.

Table 5.10. Positive Propensity as a Function of Expectation of Further Education

Educational Expectations	Market			
	Young Males (n=3,190)	Older Males (n=840)	Young Females (n=2,172)	Older Females (n=855)
Expect more education	25.9 (1.1)	16.6 (1.8)	11.6 (1.0)	6.2 (1.1)
Don't expect more education	19.9 (3.3)	6.3 (1.9)	5.5 (1.8)	1.0 (0.7)

Note: Tabled values represent the percentage within each group expressing positive active propensity with standard errors in parentheses.

<sup>a</sup>Only high school seniors and graduates were included in these analyses.

Source: Questions 410A, 410B, 510-513.

The data in Table 5.11 address the question of whether differences in educational status and AFQT groups and in expectations for more education are mirrored in propensity levels as well. Category IIIB-V youth, regardless of educational status, show higher levels of positive propensity than do Category I-IIIA youth. A pattern of interaction emerges when this relationship is viewed in light of educational expectations. Young male seniors who do not expect more education expressed higher propensity than those who do expect more education. In contrast, young male graduates and young female seniors and graduates who expect more education show higher propensity than those who do not expect more education. The finding that Graduates who expect more education express higher positive propensity than do those not expecting to get more education suggests that emphasis on educational benefits of the GI Bill should be a valuable recruiting tool.

#### **F. Specificity of Propensity: Active and Reserve/Guard**

This section presents data concerning relationships between the expression of interest in joining each of the active Services and the two Reserve Components. It examines whether the expression of interest in joining the military applies to either active or reserve duty, or whether it applies primarily to one or the other.

The percentages of young males and young females expressing positive propensity toward the active branches are significantly higher than the percentages expressing positive propensity for the Reserve Components. Specifically, 32 percent of young males express positive propensity for active duty, and only 21 percent express positive propensity for the Reserve Components. Although young females are much less likely than young males to express positive propensity, they too are more likely to choose active duty (15 percent) than the Reserve Components (8 percent). The differences among older groups are small and not significant.

Figures 5.1 and 5.2 present data bearing on whether the 4 to 32 percent of respondents who expressed positive propensity are exclusively interested in the active military or in the Reserve Components. Figure 5.1 presents the percentages of each market group showing different combinations of positive and negative Composite Active Propensity and Composite Reserve Propensity. Figure 5.2 presents the percentages of respondents showing different combinations of interest in joining the Reserves and the National Guard.

Table 5.11. Positive Propensity Among Male and Female High School Seniors and Graduates as a Function of Predicted AFQT and Expectation of Further Education

Educational Status and Expectations	Predicted AFQT Groups		Total
	I-III A	III B-V	
<u>Young Males</u>			
<u>Seniors</u>			
Expect more education	28.3 (1.7)	48.7 (2.3)	35.4 (1.8)
Don't expect more education	46.2 (8.9)	60.0 (8.8)	53.7 (8.2)
Total	29.0 (1.7)	49.7 (2.2)	36.1 (1.7)
<u>Graduates</u>			
Expect more education	15.0 (1.2)	27.1 (2.0)	19.3 (1.4)
Don't expect more education	7.4 (2.1)	17.6 (5.3)	12.2 (3.3)
Total	14.0 (1.1)	25.4 (1.9)	18.3 (1.3)
<u>Young Females</u>			
<u>Seniors</u>			
Expect more education	12.7 (2.6)	24.4 (2.4)	17.3 (2.2)
Don't expect more education	10.2 (6.2)	18.4 (8.8)	15.6 (7.6)
Total	12.6 (2.5)	24.0 (2.4)	17.2 (2.1)
<u>Graduates</u>			
Expect more education	4.8 (0.7)	13.7 (1.5)	8.4 (0.9)
Don't expect more education	2.0 (0.9)	6.9 (2.9)	4.5 (1.9)
Total	4.4 (0.6)	12.8 (1.3)	7.9 (0.8)

Note: Tabled values are cell percentages indicating positive active propensity with standard errors in parentheses. Estimates are based on interviews with 3,190 young males (1,243 seniors and 1,947 graduates) and 2,172 young females (730 seniors and 1,442 graduates).

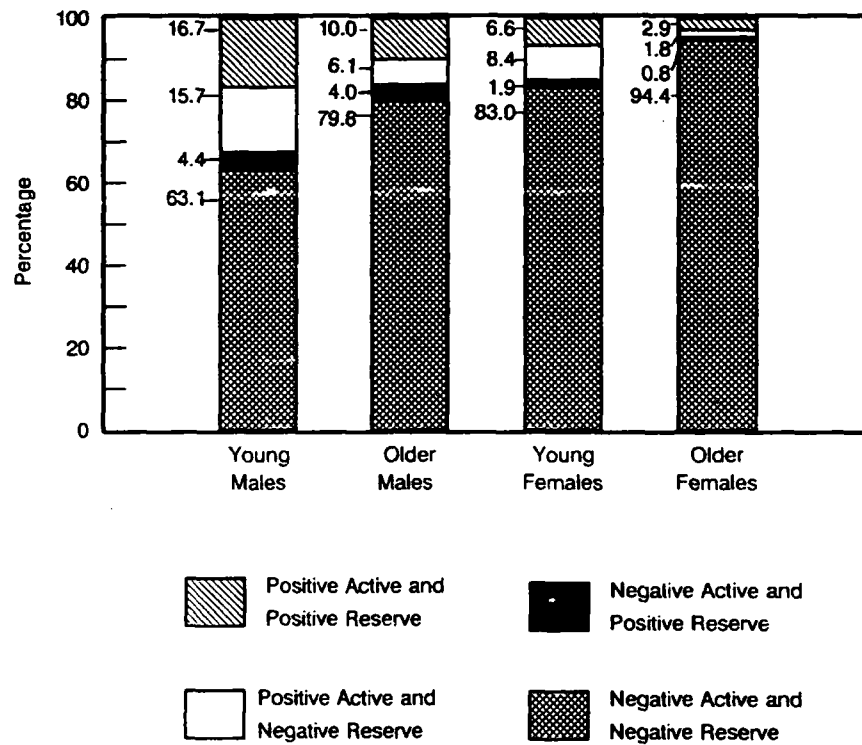
Source: Questions 410A, 410B, 510-513.

Figure 5.1 shows that less than one-fifth of the young males (17 percent) and one-tenth or less of the other three market groups (10 percent of older males, 7 percent of young females, and 3 percent of older females) expressed positive Composite Active Propensity and positive Composite Reserve Propensity. There is a similar pattern of results across the four market groups for those expressing positive active propensity and negative Reserve propensity. Much smaller percentages of all groups except the older females (who are low on all combinations that include any positive propensity response) expressed positive Reserve propensity and negative active propensity.

We can also look at these data in a slightly different fashion by describing the percentage of respondents who show any positive propensity (i.e., positive active/positive Reserve, positive active/negative Reserve, or positive Reserve/negative active). Drawing on data from Figure 5.1 we see that only about half (between 39 percent and 52 percent) of all respondents expressing any positive propensity indicated both positive Active and positive Reserve propensity. Thus, there appears to be a fair degree of specificity, with virtually half of each group showing positive propensity toward either the Active Services or the Reserve Component.

Figure 5.2 presents data regarding specificity of propensity to serve in the National Guard and the Reserves. Here again, we see that, overall, by far the largest percentage of each market group (between 79 percent and 96 percent) shows negative propensity toward both the Guard and the Reserves. Between only 2 percent and 9 percent of the market groups indicated positive propensity toward both components. Almost identical percentages (2-8 percent) of individuals in the market groups expressed positive Reserve/negative Guard propensity and positive Guard/negative Reserve propensity (0-4 percent). Looking at specificity of component preference among those expressing any positive propensity (i.e., among those who are positive Guard/positive Reserve, positive Reserve/negative Guard, and positive Guard/negative Reserve), 42 percent of the young males and 41 percent of the young females expressed positive propensity for both Reserve components. Among the almost two-thirds showing specificity, more respondents expressed positive Reserve propensity alone than expressed positive Guard propensity alone. The older females were the least specific of the four market groups. Just under half of the older females showed

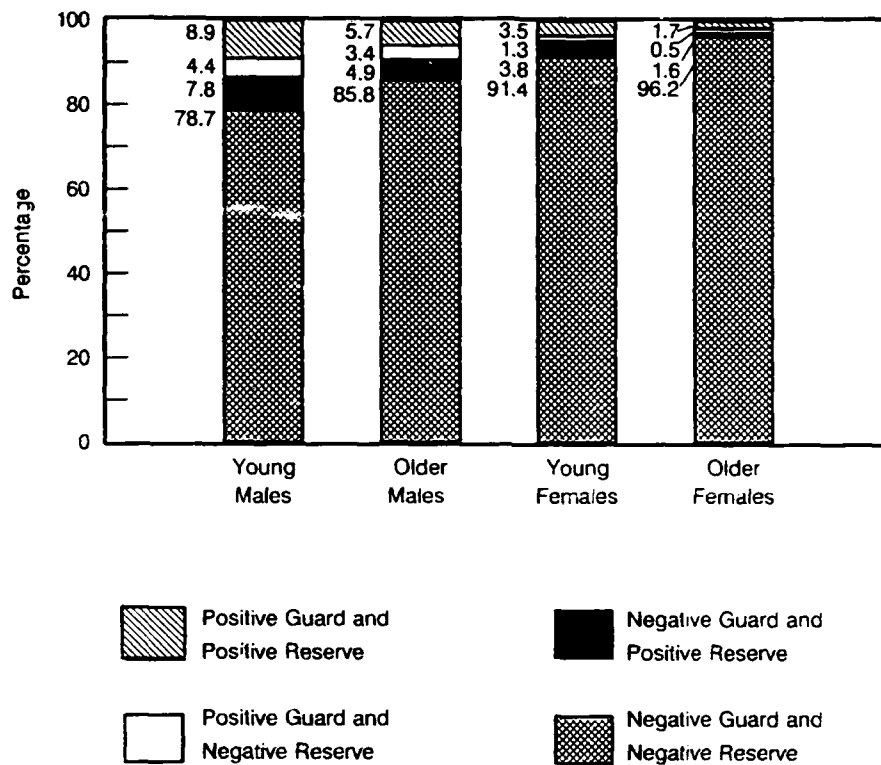
**Figure 5.1. Specificity of Propensity for Serving in Active Military and Reserve Components**



NOTE: Estimates are based on interviews with 5,642 young males, 1,103 older males, 3,448 young females, and 1,078 older females.

SOURCE: Questions 505, 507, 510-513

**Figure 5.2. Specificity of Propensity for Serving in Guard and Reserves**



NOTE: Estimates are based on interviews with 5,642 young males, 1,103 older males, 3,448 young females and 1,078 older females.

SOURCE: Questions 505, 507

positive propensity toward both Reserve components. Preference for the Guard and the Reserves was approximately equal among the older males showing positive propensity for only one of these components. Older females were closest to the younger males in their nonpreference for either component (46 percent) but, unlike any other group, when they had a preference, the percentage positive toward the Reserves is four times as large as the percentage positive toward the Guard.



## 6. INTERPERSONAL INFLUENCES, ATTITUDES, AND ACTIVE PROPENSITY

The attitudes and perceived norms of respondents have consistently been shown to be important predictors of military service. An attitude is a learned tendency or predisposition to evaluate, a person, event, or situation in a particular way. Perceived norms, on the other hand, are expected standards of behavior that group members share. Taken together, the concepts of attitudes and perceived norms suggest that individuals who have a positive attitude toward the military and believe that people important to them are favorable toward their enlistment will express higher propensity to enlist than those with negative attitudes or beliefs that important others are negative.

This chapter begins by examining the relationship of propensity to previous consideration of military service and the enlistment of a close friend or relative in the past six months. It then turns to a discussion of respondents' personal attitudes about military service, their beliefs about existing norms regarding their service, and their intentions toward enlistment in the military.

### A. Previous Consideration of Military Service

Table 6.1 presents data showing the extent to which respondents gave prior consideration to the possibility of joining the military. As shown, males are more likely to consider joining the military than females; about 76 percent of the young males and 71 percent of the older males have given the military either serious or some consideration as compared with 53 percent of the young females and 47 percent of the older females. About half, then, of both female market groups (double the percentage shown by their male counterparts) responded that they have never thought about joining the military.

Table 6.1 also shows that propensity is clearly related to respondents' previous consideration of joining the military. In all four of the market groups, respondents expressing positive propensity were more likely than those expressing negative propensity to indicate that they have considered military service. Negative propensity respondents were considerably more likely than positive propensity respondents to report

Table 6.1. Previous Consideration of Military Service

Market/Item Response	Positive Propensity	Negative Propensity	Total
<u>Young Males</u>			
Serious consideration	49.2 (1.5)	16.9 (0.8)	27.4 (0.8)
Some consideration	43.6 (1.5)	50.6 (1.1)	48.3 (0.9)
Never thought about it	7.2 (0.8)	32.5 (1.0)	24.3 (0.8)
<u>Older Males</u>			
Serious consideration	48.8 (4.4)	24.0 (1.6)	28.0 (1.5)
Some consideration	39.7 (4.3)	44.1 (1.8)	43.4 (1.7)
Never thought about it	11.6 (3.2)	31.9 (1.7)	28.6 (1.5)
<u>Young Females</u>			
Serious consideration	37.4 (3.5)	7.7 (0.7)	12.1 (0.8)
Some consideration	49.8 (4.2)	39.5 (1.3)	41.0 (1.3)
Never thought about it	12.8 (3.6)	52.9 (1.4)	46.9 (1.3)
<u>Older Females</u>			
Serious consideration	43.0 (7.3)	10.9 (1.1)	12.4 (1.1)
Some consideration	49.5 (7.5)	34.4 (2.1)	35.1 (2.1)
Never thought about it	7.6 (4.2)	54.7 (2.2)	52.5 (2.1)

Note: Tabled values are column percentages with standard errors in parentheses. Estimates are based on interviews with 5,639 young males, 1,103 older males, 3,448 young females and 1,078 older females.

Source: Questions 510-513, 525.

that they have never considered military service. In fact, there was a 47 percentage point difference between older females expressing positive propensity who had never considered joining the military and their negative propensity counterparts. Among young females this difference was 40 percentage points. The lower probability of previous consideration of service associated with negative propensity among the male market groups is much less striking; the differences are between 20 and 25 percentage points.

#### **B. Attitudes and Interpersonal Influences**

In past YATS II reports, norms and attitudes have been strongly associated with propensity. Such feelings should be reflected in intentions to serve or to advise others to consider the military by such actions as seeing a recruiter. Table 6.2 presents the percentage of individuals in each of the market groups indicating positive attitudes, perceived norms, and behavioral intentions to advise others to see a recruiter. The complete distributions, by propensity, for these three questions are presented in Tables C.5a and C.5b in Appendix C.

The total percentage of respondents who had a positive attitude toward military service ("Own feelings are favorable") differed considerably among the four market groups. Young males were by far the most likely to be positive overall (41 percent). They are followed by older males (31 percent), young females (25 percent), and older females (21 percent). Also notable is that the expression of positive propensity is highly related to a favorable feeling toward military service. In each of the four market groups, those who expressed positive propensity were three to five times more likely to have favorable feelings toward the military than those who expressed negative propensity (68-84 percent versus 16-24 percent).

The same general order of market group favorability is apparent for perceived norms of serving among those who matter most to the respondent. Older females are least likely of the four market groups to report favorable perceived norms (24 percent), followed by young females (25 percent) and older males (31 percent); once again, young males are the most likely to report that those who matter most are favorable toward their serving in the military (42 percent). Within each market group,

Table 6.2. Attitudes and Interpersonal Influences Concerning Military Service and Advice to Friend About Seeing a Recruiter

Response	Young Males			Older Males		
	Positive Propensity (n=1,861)	Negative Propensity (n=3,746)	Total (n=5,607)	Positive Propensity (n=1,928)	Negative Propensity (n=928)	Total (n=1,098)
Own feelings are favorable <sup>a</sup>	78.1 (1.2)	22.8 (1.0)	40.8 (0.9)	68.2 (4.1)	23.6 (1.6)	30.7 (1.6)
Those who matter most are favorable <sup>a</sup>	64.3 (1.4)	30.7 (1.0)	41.6 (0.9)	60.6 (4.4)	30.8 (1.7)	35.6 (1.6)
I would tell friend that seeing a recruiter is a good idea	58.6 (1.5)	25.2 (1.0)	36.1 (0.9)	51.7 (4.5)	28.9 (1.7)	32.6 (1.6)
Response	Young Females			Older Females		
	Positive Propensity (n=473)	Negative Propensity (n=2,958)	Total (n=3,431)	Positive Propensity (n=53)	Negative Propensity (n=1,017)	Total (n=1,070)
Own feelings are favorable <sup>a</sup>	73.6 (4.1)	16.4 (1.0)	25.0 (1.2)	83.8 (5.8)	18.0 (1.7)	21.1 (1.7)
Those who matter most are favorable <sup>a</sup>	54.0 (4.4)	25.1 (1.2)	29.5 (1.2)	53.6 (7.5)	22.7 (2.0)	24.1 (1.9)
I would tell friend that seeing a recruiter is a good idea	59.1 (4.6)	27.7 (1.3)	32.5 (1.2)	67.6 (6.9)	30.1 (2.0)	31.9 (1.9)

Note: Tabled values are percentages with standard errors in parentheses.

<sup>a</sup>Includes those responding either "somewhat favorable" or "very favorable."

Source: Questions 510-513, 690-692.

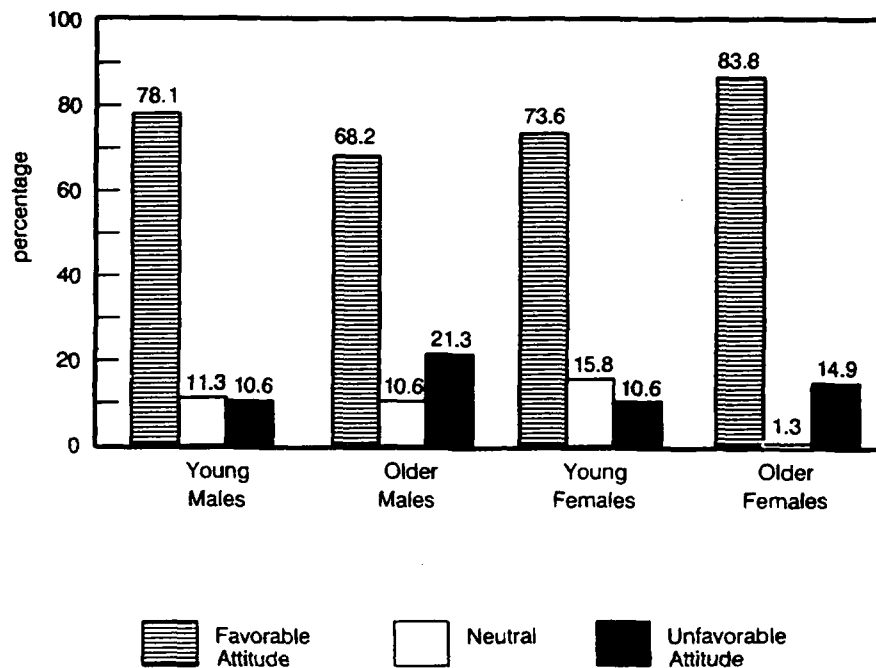
those expressing positive propensity are twice as likely to report favorable norms than are those expressing negative propensity.

The market groups look much more similar on the final item in the table that addresses telling a friend that seeing a recruiter is a good idea. Overall, 32 to 33 percent of the older males, young females, and older females, report that they would tell a friend that seeing a recruiter is a good idea. A larger percentage of young males reported that they would do so (36 percent). Again, positive propensity is highly related to favorable recommendations about recruiter contact. In general, respondents expressing positive propensity were twice as likely to indicate that seeing a recruiter was a good idea as those expressing negative propensity.

Figures 6.1 through 6.3 show the percentages of respondents expressing positive propensity for the four market groups for each of the three items discussed above. Figure 6.1 clearly indicates that across all four market groups, those with favorable attitudes had extremely high propensity relative to those with neutral or unfavorable attitudes. A similar, though less striking, pattern is evident in Figure 6.2 regarding the perceived favorability toward military service of people important to the respondent. Those who reported that important others were favorable toward their serving had much higher propensity than those who reported that others were neutral or unfavorable toward their serving. Levels of favorability differed by only 10 percentage points among the four market groups with young males having the highest level (64 percent) and the two female groups having the lowest level (54 percent). About one-fifth of the young males and one-quarter of the other three market groups felt that important others were unfavorable toward the respondent serving in the military.

Figure 6.3 shows that those who would encourage a friend to see a recruiter are more likely to express positive propensity than those who were neutral or would call such contact a "waste of time." Between one-half and two-thirds of the market groups who indicated that seeing a recruiter is a good idea have positive propensity. However, substantial percentages of respondents who felt that the decision to see a recruiter was up to their friends also had positive propensity (30-42 percent). On the other hand, very few of those who said that they would tell a friend

**Figure 6.1. Expressed Positive Propensity as a Function of Own Attitudes Toward Serving in the Military**

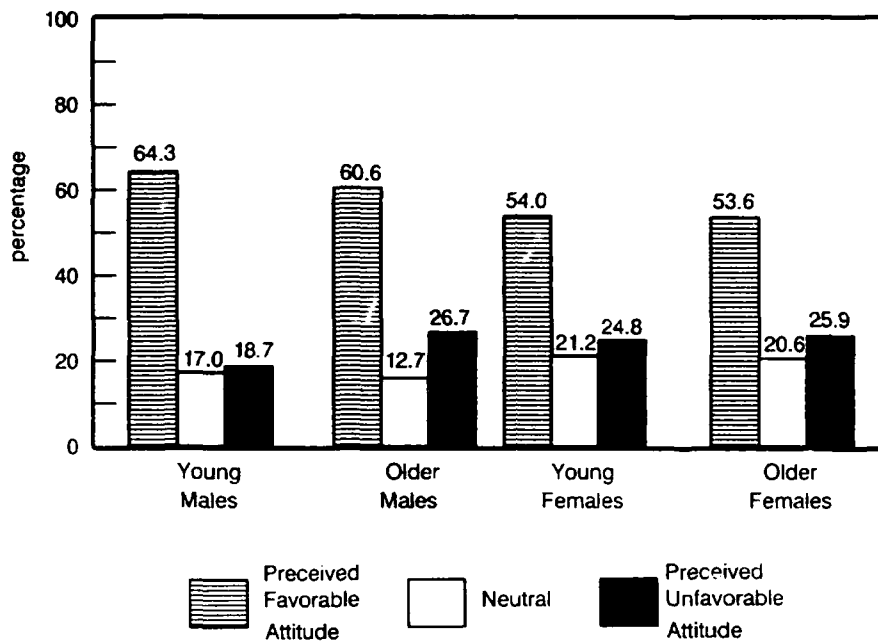


NOTE: Values represent percentages of respondents expressing positive propensity.

Estimates are based on interviews with 5,607 young males, 1,098 older males, 3,431 young females and 1,070 older females. Favorable includes those responding either "somewhat favorable" or "very favorable." Unfavorable includes those responding either "somewhat unfavorable" or "very unfavorable." Neutral consists of those responding "neither favorable nor unfavorable."

SOURCE: Questions 510-513, 692.

**Figure 6.2. Expressed Positive Propensity as a Function of Perceived Attitudes Toward Military Service of People Important to Respondent**

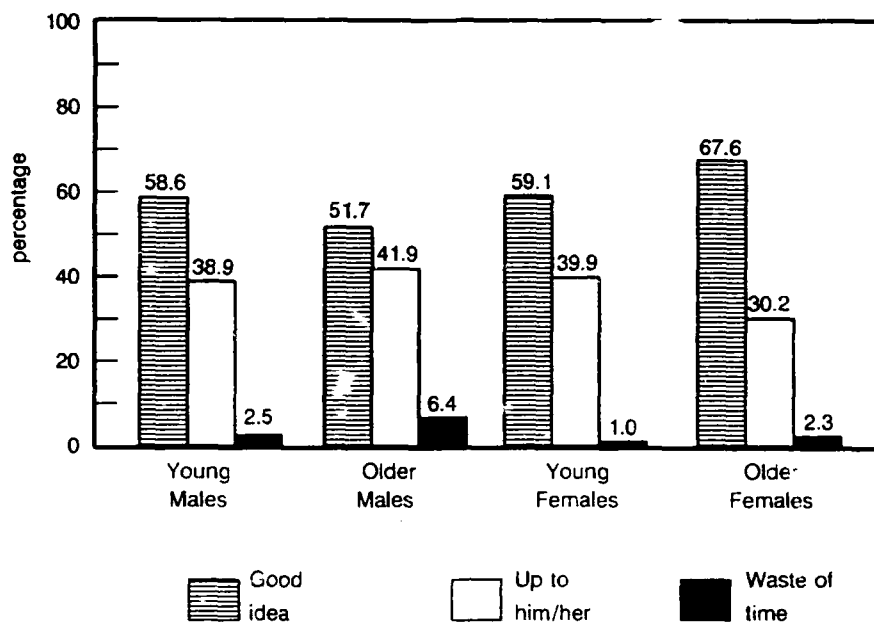


NOTE: Values represent percentage of respondents expressing positive propensity.

Estimates are based on interviews with 5,575 young males, 1,096 older males, 3,403 young females and 1,063 older females. Favorable includes those responding either "somewhat favorable" or "very favorable." Unfavorable includes those responding either "somewhat unfavorable" or "very unfavorable." Neutral consists of those responding "neither favorable nor unfavorable."

SOURCE: Questions 510-513, 691.

**Figure 6.3. Expressed Positive Propensity as a Function of Respondent's Advice to a Friend About Seeing a Military Recruiter**



NOTE: Values represent percentage of respondents expressing positive propensity.  
 Estimates are based on interviews with 5,591 young males, 1,098 older males, 3,432 young females and 1,072 older females.

SOURCE: Questions 510-513, 690.



that seeing a recruiter was a waste of time expressed positive propensity (1-7 percent).

Taken together, these results indicate that although encouraging a friend to see a recruiter is not as strong an indicator of positive propensity as one's own attitude toward the military and the attitudes of important others, these three items nonetheless constitute consistent and important indicators of propensity to serve in the military.

### C. Attitudes and Interpersonal Influences as a Function of Predicted AFQT

This section presents a discussion of young males' and young females' attitudes and interpersonal influences as they relate to Predicted AFQT category.

Table 6.3 presents, as a function of Predicted AFQT, the percentages of the young market groups indicating that their own and significant others' feelings toward serving in the military are either somewhat or very favorable, and the percentages who would tell a friend that seeing a recruiter is a good idea. Two general patterns are revealed by even a cursory examination of this table. First, for both the young males and young females, it is clear that respondents in Predicted AFQT categories IIIB-V are much more likely to report that both their own and important others' feelings about military service are favorable, and that they would tell a friend that seeing a recruiter is a good idea, than are respondents in categories I-IIIA. Among the young males, the differences between the contrasted AFQT groups range from 8 to 16 percentage points; each difference is statistically significant. Among the young females, the differences range from 9 to 13 percentage points; seven out of the nine comparisons are statistically significant.

The second pattern concerns differences between the educational status groups. Among the males, the Younger High School Students are more likely to show favorable personal and others' attitudes as well as to express a positive attitude toward a friend regarding recruiter contact than are the High School Seniors. The High School Seniors, in turn, are more likely than the High School Graduates to have favorable personal feelings toward military service and to tell a friend that seeing a recruiter is a good idea. For the young males overall, then, increased educational status is associated with decreased favorability toward military service, as

Table 6.3. Young Males' and Young Females' Attitudes, Interpersonal Influences Concerning Military Service and Advice to a Friend as a Function of Predicted AFQT

	Predicted AFQT Group							Total (n=5,697)
	High School Graduates (n=1,942)		High School Seniors (n=1,237)		Younger High School Students (n=1,470)			
	Category I-III A	Category IIIB-V	Category I-III A	Category IIIB-V	Category I-III A	Category IIIB-V		
						Non-Completers (n=968)	Total	
<u>Young Males</u>								
Own feelings are favorable <sup>a</sup>	24.8	36.7	37.0	51.5	44.8	60.9	43.9	40.8
Those who matter most are favorable <sup>a</sup>	31.4	42.9	34.4	47.9	41.5	57.0	45.3	41.6
I would tell friend that seeing a recruiter is a good idea	26.2	34.2	31.0	44.2	37.4	49.2	39.5	36.1
<u>Young Females</u>								
Own feelings are favorable <sup>a</sup>	15.2	25.8	17.3	30.1	30.0	37.6	29.0	25.0
Those who matter most are favorable <sup>a</sup>	19.6	28.9	24.1	35.9	30.6	40.4	36.7	29.5
I would tell friend that seeing a recruiter is a good idea	25.5	30.4	25.9	36.8	32.4	43.9	39.2	32.5

Note: Tabled values are cell percentages.

<sup>a</sup>Includes those responding either "somewhat favorable" or "very favorable."

Source: Questions 510-513, 690-692.

measured by attitudes, norms, and anticipated behaviors. These results are not surprising, given the close association already seen between propensity, Predicted AFQT, and attitudes and interpersonal influences.

Although the patterns seen between educational status and positivity of attitudes and norms for young females are in the same direction as those for the young males, the differences seldom reach conventional levels of statistical significance. Only Category I-IIIA Younger High School Students with regard to one's own feelings and Category IIIB-V High School Seniors with regard to others' feelings are significantly higher than the comparable next highest educational status group.

Table 6.4 presents the percentages of respondents expressing positive propensity within each of the Predicted AFQT groups for the three variables discussed above. The findings in general support the conclusions drawn from Table 6.3 and discussed above. Overall, regardless of the fact that the respondent has expressed attitudes, norms and behavioral intentions favorable to military service, as he or she completes additional years of education, his or her own expressed propensity to enlist decreases. The strongest contrast demonstrating this decrement as a function of increased educational status is that between High School Seniors and High School Graduates. In fact, among females, none of the six Table 6.4 contrasts between Younger High School Students and comparable High School Seniors are statistically significant.

However, once again, it is important to remember that High School Graduates who actually enlisted following graduation--presumably those with the greatest propensity--are no longer eligible for inclusion in the YATS II sample. Thus, the definition of the sample itself severely limits interpretation of these differences. Is it that Seniors are indeed more likely to have positive propensity than Graduates, or that many of the Graduates with positive propensity actually enlisted and thus are no longer included in the sample?

In addition, virtually all of the contrasts, regardless of gender, measure (attitude, norm or intention) or educational status, between respondents in Category I-IIIA and their Category IIIB-V counterparts reveal that the former are much less likely to show positive propensity than the latter.

Table 6.4. Positive Propensity of Young Males and Young Females as a Function of Attitudes and Interpersonal Influences Concerning Military Service, Advice to a Friend and Predicted AFQT

	Predicted AFQT Group							
	High School Graduates (n=1,942)		High School Seniors (n=1,257)		Younger High School Students (n=1,470)		Non-Completers (n=968)	Total (n=5,607)
	Category	Category	Category	Category	Category	Category		
	I-III	IIIB-V	I-III	IIIB-V	I-III	IIIB-V		
<u>Young Males</u>								
Own feelings are favorable <sup>a</sup>	35.3	52.3	57.0	75.6	67.5	78.1	63.9	62.3
Those who matter most are favorable <sup>a</sup>	25.6	40.2	48.2	65.7	58.9	70.9	46.9	50.1
I would tell friend that seeing a recruiter is a good idea	25.3	41.8	49.0	67.8	58.4	75.0	53.8	52.9
<u>Young Females</u>								
Own feelings are favorable <sup>a</sup>	19.7	40.2	44.4	64.2	52.5	60.9	36.1	44.2
Those who matter most are favorable <sup>a</sup>	8.6	23.4	27.2	40.4	31.0	44.1	26.1	27.7
I would tell friend that seeing a recruiter is a good idea	7.6	23.9	24.7	47.9	33.9	49.0	21.1	27.4

Note: Tabled values represent the percentage within each category showing positive active propensity.

<sup>a</sup>Includes those responding either "somewhat favorable" or "very favorable."

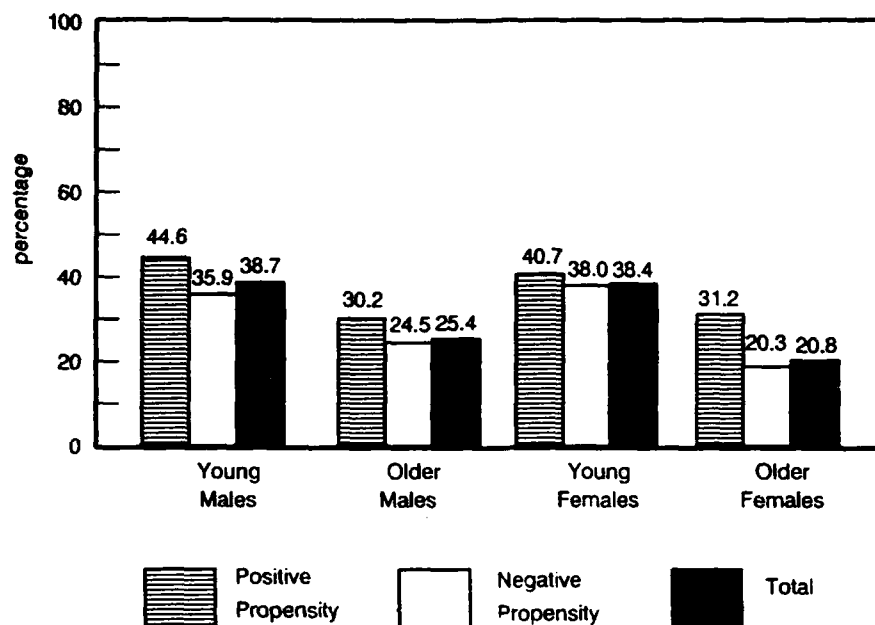
Source: Questions 510-513, 600-602.

Another way to look at the data in Table 6.4 is to compare the degree of positive propensity shown as a function of the measure itself: attitude, norm or intention. When the data are examined in this fashion, it is clear that positive propensity is most strongly associated with respondents' own personal feelings. Across educational status and Predicted AFQT, relative positive propensity is much higher with expressed favorability of one's own feelings about military service than with the perceived favorable feelings of important others and telling a friend that seeing a recruiter is a good idea. The latter two measures do not differ from each other with regard to expressed positive propensity. This relationship holds true for both young males and young females.

#### D. Enlistment of a Close Friend or Relative

The recent enlistment of a close friend or relative is also expected to be a strong personal influence regarding military service. Figure 6.4 presents the percentages of the four market groups reporting the occurrence of this event in the past 6 months. Inspection of this figure reveals that about two-fifths of the young market groups, one-fourth of the older males, and one-fifth of the older females report this occurrence. In contrast to the 1986 differences seen in all market groups as a function of propensity, in 1987 only the young males showed statistically significant differences in their reports of the enlistment of a close friend as a function of propensity. In other words, although young males expressing positive propensity were more likely than those expressing negative propensity to report this occurrence (45 percent versus 36 percent, respectively), none of the other market groups showed this association. Note that even though the difference between older females expressing positive propensity and those expressing negative propensity was 11 percentage points, this difference was not statistically significant.

**Figure 6.4. Close Friend or Relative Enlisted in the Past Six Months**



NOTE: Estimates are based on interviews with 5,608 young males (1,861 with positive propensity and 3,747 with negative propensity), 1,100 older males (172 with positive propensity and 928 with negative propensity), 3,428 young females (470 with positive propensity and 2,958 with negative propensity) and 1,073 older females (53 with positive propensity and 1,020 with negative propensity).

SOURCE: Questions 510-513. 682.

## 7. ENLISTMENT INCENTIVES AND PROPENSITY

Young people have a number of career and employment options, one of them being military service. Each option has both positive and negative aspects. The enlistment decision is likely to be affected by many factors, including perceptions of military life, knowledge about pay, educational benefits, time required for annual and monthly training, and consequences for one's current and future employment status. Consequently, military recruiting and advertising seek to increase young people's knowledge about the benefits of military service with the ultimate goal of creating a favorable attitude toward the military.

This chapter examines knowledge of selected enlistment incentives and perceived consequences of enlistment, and how this knowledge relates to propensity to join. Because the active Services and Reserve Components differ both in their basic requirements and benefits, they are discussed separately.

### A. Active Services

This section examines the knowledge level of each of the four market segments about monthly starting pay and educational benefits.

#### 1. General Intention to Enlist Given Knowledge of Monthly Starting Pay

Respondents were told that the starting monthly pay for an enlisted person is approximately \$600 and were asked, on the basis of this knowledge, how likely they were to be serving in the military in the next few years. This item is highly similar to a prior question (Q503) on general intention to serve in the military (asked without comment about amount of starting pay). Table 7.1 presents the results from Q503 as a before measure of general intention, and the results from Q554 as an after measure of general intention. It is assumed that changes between the first and the second administration of a parallel question are at least partly a reaction to new information obtained--in this case, starting pay. The before-after changes in Table 7.1 among both male groups were small and not statistically significant. Both young females and older females, on the other hand, showed a significant increment in general intention to

Table 7.1. Change in General Intention to Serve in the Military in the Next Few Years Given Knowledge of Actual Monthly Starting Pay

Market/Likelihood of Serving	Mention of Starting Pay				Change
	Before <sup>a</sup>		After <sup>b</sup>		
<u>Young Males</u>					
Definitely	6.3	(0.5)	6.5	(0.5)	
Probably	20.3	(0.7)	20.4	(0.7)	
Total Positive	26.6	(0.8)	26.9	(0.8)	+0.3
Probably Not	29.2	(0.8)	36.2	(0.9)	
Definitely Not	43.9	(0.9)	36.9	(0.9)	
Don't Know/Refuse	0.4	(0.1)	0.0	(**)	
Total Negative	73.4	(0.8)	73.1	(0.8)	-0.3
<u>Older Males</u>					
Definitely	1.0	(0.3)	1.5	(0.4)	
Probably	8.9	(1.0)	9.8	(1.0)	
Total Positive	9.9	(1.0)	11.3	(1.1)	+1.4
Probably Not	26.2	(1.5)	29.5	(1.6)	
Definitely Not	63.7	(1.7)	59.2	(1.7)	
Don't Know/Refuse	0.3	(0.2)	0.0	(**)	
Total Negative	90.1	(1.0)	88.7	(1.1)	-1.4
<u>Young Females</u>					
Definitely	1.3	(0.2)	1.8	(0.2)	
Probably	9.2	(0.8)	11.8	(1.0)	
Total Positive	10.5	(0.9)	13.5	(1.0)	+3.0*
Probably Not	19.1	(1.1)	29.0	(1.2)	
Definitely Not	70.4	(1.3)	57.4	(1.3)	
Don't Know/Refuse	0.3	(0.3)	0.0	(**)	
Total Negative	89.5	(0.9)	86.5	(1.0)	-3.0*
<u>Older Females</u>					
Definitely	0.5	(0.2)	0.7	(0.3)	
Probably	3.0	(0.6)	6.0	(1.1)	
Total Positive	3.5	(0.6)	6.7	(1.2)	+3.2*
Probably Not	14.6	(1.4)	17.9	(1.5)	
Definitely Not	81.9	(1.5)	75.4	(1.8)	
Don't Know/Refuse	0.0	(**)	0.0	(**)	
Total Negative	96.5	(0.6)	93.3	(1.2)	-3.2*

Note: Tabled values are column percentages with standard errors in parentheses. Estimates are based on interviews with 5,642 young males, 1,103 older males, 3,448 young females and 1,078 older females.

\*Differences are significant at the 95 percent level of confidence.

\*\*Informative standard error not available.

<sup>a</sup>Refers to responses to Q503; general intention to serve in the military.

<sup>b</sup>Refers to responses to Q554; general intention to serve in the military given knowledge of starting pay.

Source: Questions 503, 554.



serve in the military in the next few years (3.0 and 3.2 percentage points, respectively). This result, albeit smaller, was also evident in the 1986 YATS II data and indicates strongly that accurate knowledge about starting pay is not a disincentive to joining the military. In fact, for females at least, accurate knowledge appears to be an incentive. Given the continuing disparity between civilian wages for males and females, these data are not surprising and may be of important to recruiting efforts.

## **2. Propensity and Knowledge of Educational Benefits**

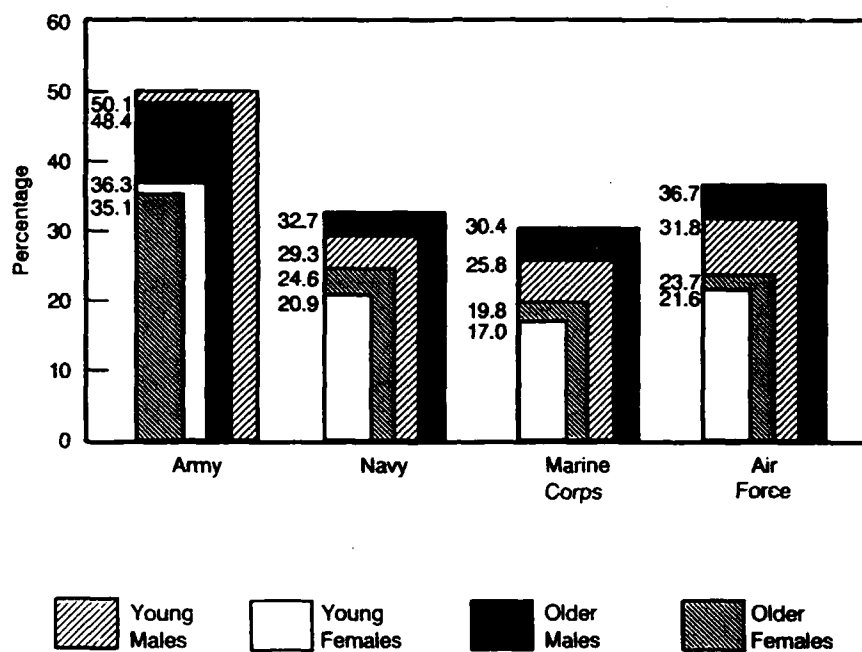
All of the Services offer educational benefits to enlistees. Under the New GI Bill, high school graduate enlistees who contribute \$1,200 of their first year's pay receive a basic educational benefit of up to \$10,800. In addition, qualified Army recruits who enlist in some hard-to-fill skills can supplement the basic benefit under the Army College Fund by as much as \$14,400 for a total educational benefit of \$25,200.

Responses to questions about the existence of educational benefits and which Services offer them are presented in Table C.6 (see Appendix C) and are excerpted in Table 7.2 and Figure 7.1. Table 7.2 shows that between one-half and two-thirds of all respondents believe that at least one Service has a program that helps pay for college or vocational training. Both young and older males were more likely to report this (64 percent and 61 percent, respectively) than young females (52 percent) who were, in turn, more likely to report this than older females (48 percent).

Propensity was not associated with knowledge of educational benefits. It is interesting to note, however, that the percentages of young and older males knowing about education benefits rose significantly between 1986 and 1987 (5 and 12 percentage points, respectively), as did the percentage for young females (6 percentage points). Older females, surveyed in only the past two years, showed similar levels of knowledge.

Respondents were also queried about which Services offer a program that helps pay for college or vocational training. Figure 7.1 clearly shows that the Army's heavy advertising is effective in that the Army was most frequently mentioned (50 percent for young males; 48 percent for older males; 36 percent for young females; 35 percent for older females). The Marine Corps was consistently least likely to be mentioned in this regard. The figure also illustrates that young males show, in general, the largest percentages asserting that each Service aids in educational/vocational training.

**Figure 7.1. Overall Beliefs That Specific Individual Services Help Pay for College or Vocational Training**



NOTE: Estimates are based on interviews with 5,642 young males, 1,103 older males, 3,448 young females and 1,078 older females.

SOURCE: Question 560.

Table 7.2. Overall Beliefs that at Least One Service Helps Pay for College or Vocational Training

Market Group	Positive Propensity	Negative Propensity	Total
Young Males	66.3 (1.5)	62.9 (1.0)	64.0 (0.8)
Older Males	58.7 (4.5)	61.9 (1.8)	61.4 (1.7)
Young Females	51.5 (4.2)	51.6 (1.4)	51.6 (1.3)
Older Females	54.9 (7.4)	48.0 (2.2)	48.3 (2.2)

Note: Tabled values are percentages of respondents saying that at least one Service helps pay for college or vocational training; standard errors are in parentheses. Estimates are based on interviews with 5,642 young males, 1,103 older males, 3,448 young females and 1,078 older females.

Source: Questions 510-513, 559.

### 3. When Educational Benefits Can be Used

Table 7.3 presents the responses to a question concerning when the money provided by educational benefits can be used. Between 60 and 67 percent of the market groups correctly said "both" while in the Service and after leaving. In general, those who responded incorrectly were significantly more likely to answer that the benefits were available only while in the military (17-18 percent of the males and 24 percent of the females) than only after discharge (12-13 percent of the males and 10-12 percent of the females). Only the young males showed significant response differences as a function of propensity. Those expressing positive propensity were less likely to believe that educational benefits would be available to them both during and after military service than those expressing negative propensity; positive propensity young males were relatively more likely to say that the benefits would only be available while they were in the military.

Table 7.3. When Educational Benefits Can Be Used

Response	Young Males			Older Males		
	Positive Propensity (n=1,160)	Negative Propensity (n=2,144)	Total (n=3,304)	Positive Propensity (n=97)	Negative Propensity (n=522)	Total (n=619)
While in the military	24.2	14.7	17.9 (0.8)	12.4	17.9	17.0 (1.8)
After leaving the military	12.3	13.1	12.8 (0.7)	11.9	12.5	12.4 (1.5)
Both	58.5	66.1	63.5 (1.1)	68.7	66.0	66.4 (2.2)
Don't know	5.0	6.2	5.8 (0.8)	7.0	3.6	4.1 (0.9)

Response	Young Females			Older Females		
	Positive Propensity (n=245)	Negative Propensity (n=1,345)	Total (n=1,590)	Positive Propensity (n=28)	Negative Propensity (n=415)	Total (n=443)
While in the military	28.3	23.2	24.0 (1.5)	35.5	23.4	24.1 (3.1)
After leaving the military	5.5	11.0	10.2 (1.1)	8.7	11.5	11.9 (2.8)
Both	62.5	61.3	61.5 (1.7)	45.9	60.9	60.1 (3.6)
Don't know	3.8	4.5	4.4 (0.5)	0.0	4.3	4.0 (1.0)

Note: Tabled values are column percentages with standard errors in parentheses.

Source: Questions 510-513, 563.

## **B. Reserve Components**

Pay and benefits are thought to positively influence the decision to join the National Guard or Reserves as well as the decision to join the active Services. Additional important factors are beliefs about the time required for training. Older males are the most likely of the market groups to serve in the Guard or Reserves, and because many of them have careers and families, other relevant issues are the proximity of a Guard or Reserve unit to home, and how Reserve Components service might affect a civilian job. This section examines these issues in relation to propensity to enlist in the National Guard/Reserves, i.e., Composite Reserve Propensity.

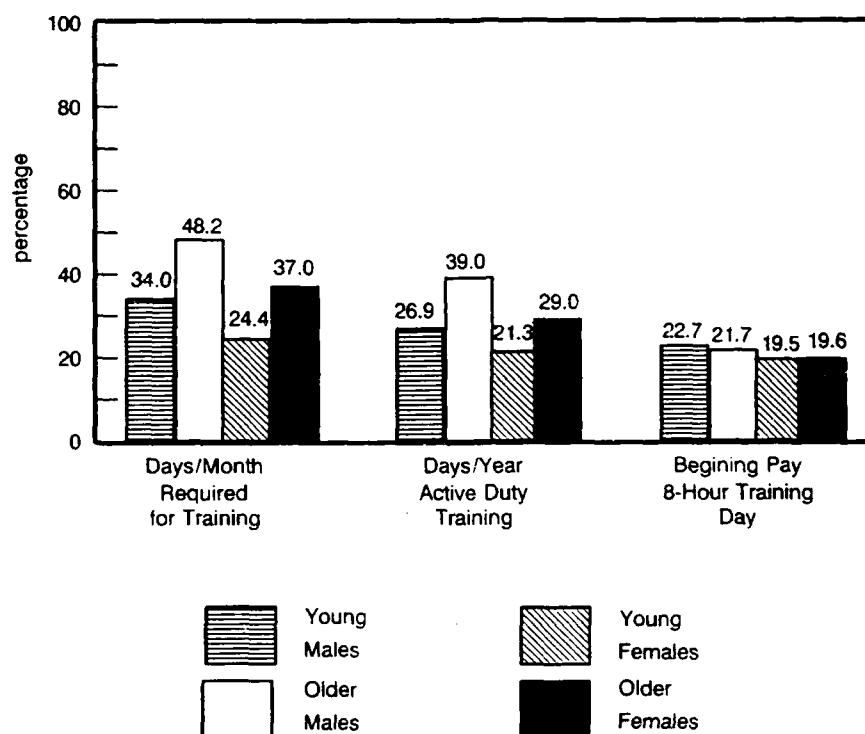
### **1. Knowledge of Pay and Time Required for Guard/Reserve Participation**

Tables C.7a and C.7b (Appendix C) present respondents' estimates of required training days per month, the amount of time required for annual active duty training, and beginning pay for an eight-hour weekend training day. Figure 7.2 displays the percentages in each market group that knew the correct amount of pay and training time required for Guard/Reserve participation.

Two days are required for monthly training in the Guard/Reserves. Older males were most likely to give the correct answer (48 percent). Both older females and young males were more accurate (37 percent and 34 percent, respectively) than the young females (24 percent). It is also important to note, however, that a sizeable percentage of each group said that eight or more days a month are required for training--that would entail virtually every weekend. Young females were most likely (39 percent), and older males least likely (19 percent) to assert this, with young males and older females falling between these two extremes (29 percent and 25 percent, respectively). Believing that monthly training would interfere with all of one's weekends and/or one's civilian occupation could certainly discourage a prospective enlistee from considering service in the Guard/Reserve.

Annual active duty training consists of two weeks (14 days) each year. Older males, again, gave the most accurate estimates. Thirty-nine percent of the older males but only 29 percent of the older females and 27 percent of the young males gave the correct estimate. Young females were again the least likely to show correct knowledge (21 percent). As was the case for

**Figure 7.2. Respondents with Correct Knowledge of Reserve Components Enlistment Factors**



NOTE: Estimates are based on interviews with 2,836 young males, 1,102 older males, 3,445 young females and 1,077 older females. In 1987, 2 days per month were required for training and 14 days per year were required for annual training. Beginning pay for an 8-hour training day was \$40.56; respondents were considered correct if they responded with a figure between \$30 and \$49 inclusive.

SOURCE: Questions 571-573.

estimates of monthly training time, the younger groups were relatively more likely than their older counterparts to overestimate the number of required training days per year; 27 percent of the young males and 33 percent of the young females versus only 18 percent of the older males and 21 percent of the older females estimated that between 31 and 90 days of annual training time are required in the Guard/Reserves. These overestimates, like the overestimates of monthly training time, are troubling because these misconceptions may discourage some individuals from seriously considering Reserve/Guard service. Further, the percentages of respondents making these overestimates have remained consistent for the past three years.

Beginning pay for an eight-hour training day in 1987 was \$40.56. No market group was especially accurate with respect to knowledge about this aspect of Guard/Reserve participation, even though the range of responses considered accurate was wide (between \$30 and \$49). Only 23 percent of the young males, 22 percent of the older males, and 20 percent of the young and older females gave an accurate response. Clearly then, older groups, which had been more accurate in other questions, were not more accurate in this area of knowledge. In addition, between 17 and 25 percent of the groups thought that beginning pay for an eight-hour training day was \$100 or more, indicating that a large minority of respondents would find the pay in the Reserve Components disappointing.

## 2. Effects of Potential Cash Bonus on Propensity to Enlist

Respondents were asked a series of questions to determine how likely they would be to enlist in the Reserves or National Guard for eight years if increasingly larger cash bonuses were offered. Unfortunately, an appropriate baseline measure of general intention to join the Reserve Components was not obtained.<sup>1</sup> The relative effects of increasingly larger hypothetical bonuses, however, can still be examined.

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<sup>1</sup>/ The appropriate baseline measure would have been an item like Q503 that asked about the respondents' likelihood of joining the Guard or Reserves. Instead, items were asked about propensity to join the Reserve Component--not about the general likelihood of joining. Thus, the comparison with the follow-up questions regarding likelihood of joining, given "X" bonus, involves two different types of questions.

Computations for all bonus questions used a common base of respondents (i.e., the number responding to the initial item in each series) to permit a direct comparison among benefit amounts. It was assumed that those responding "definitely" to the first item would respond in the same way to the second item in which an even greater amount was offered. Similarly, those responding "definitely" to the first and second items were assumed to make that response on the third item. Percentages were then computed for the second and third bonus items based on these adjusted numbers of respondents.

Table 7.4 shows that prospects of receiving a cash bonus strongly affected propensity to enlist in the Guard or Reserves. Almost 24 percent of young males said that they would "probably" or "definitely" enlist for eight years if there were a \$2,000 bonus for doing so. About 16 percent of the older males and young females, and 10 percent of the older females made comparable responses. For all four groups, these figures were larger than the Composite Reserve Propensity proportions. Increasing the hypothetical bonus offer to \$4,000 raised these figures by 9 percentage points for young males and 5 points for older males, young females, and older females. The offer of a \$6,000 bonus further increased likelihood of enrollment by an additional 6 to 9 percentage points, depending on the market group. Overall, then, tripling the original hypothesized bonus from \$2,000 to \$6,000 increased the likelihood of enlistment by 19 percentage points for young males, 14 points for older males, 13 points for young females, and 10 points for older females.

The increments associated with these bonus increases have remained very similar over the past four years of YATS studies (1984-1987) despite the fact that the first two years examined the effects of hypothetical bonuses for enlisting for six years, as opposed to the eight-year enlistment bonuses investigated in 1986 and 1987. Regardless of the magnitude of the propensity increases that may occur by offering cash bonuses, the possible gains in enlistment need to be weighed against the costs of giving a bonus to all enlistees.



Table 7.4. Incremental Effects of Cash Bonus on Propensity to Enlist in Guard/Reserve

Benefit Amount	Young Males		Older Males	
	Likelihood of Enlistment	Increment	Likelihood of Enlistment	Increment
Composite Reserve Propensity	21.1 (0.7)		13.9 (1.2)	
<u>Enlistment Bonus</u>				
\$2,000	23.9 (1.0)	-	15.5 (1.2)	-
\$4,000	33.3 (1.2)	9.4	20.6 (1.4)	5.1
\$6,000	42.4 (1.2)	9.1	29.0 (1.5)	8.4

Benefit Amount	Young Females		Older Females	
	Likelihood of Enlistment	Increment	Likelihood of Enlistment	Increment
Composite Reserve Propensity	8.5 (0.6)		3.7 (0.6)	
<u>Enlistment Bonus</u>				
\$2,000	16.3 (1.1)	-	9.5 (1.0)	-
\$4,000	21.5 (1.1)	5.2	14.3 (1.3)	4.8
\$6,000	29.3 (1.3)	7.8	19.9 (1.6)	5.6

Note: Tabled values are percentages of respondents who said they were "definitely" or "probably" likely to enlist in the Guard/Reserve given the bonus indicated. The numbers of respondents to the second and third items in each series have been adjusted to the base number responding to the first item in the series. Estimates are based on interviews with 2,818 young males, 1,092 older males, 3,433 young females and 1,073 older females.

Source: Questions 505, 507, 579-581.

### 3. Beliefs About Ease and Consequences of Guard/Reserve Participation

Participation in the National Guard or the Reserves is virtually always a part-time adjunct to civilian employment or full-time education. Since potential conflicts between participation and civilian careers may be an important factor in deciding to join the Guard or Reserves, several questions were asked to assess respondents' beliefs about this issue. Two of the five questions were fairly general and applied regardless of actual employment status. The other three questions applied to employed (but not self-employed) respondents. The questions asked were:

- whether an employer would hold a job for them if they were away for active duty training with the Guard/Reserve for 3 to 6 months;
- whether respondents would lose job seniority during the training period for the Guard/Reserve;
- whether their employer had a specific policy about Guard/Reserve participation;
- whether their employer was positive toward Guard Reserve participation; and
- whether they had talked with a supervisor about their employer's policy about the Guard/Reserve.
- whether they believed there were any laws that protect Guard and Reserve members from losing their jobs or job seniority if they are absent from work to attend military training.

Table 7.5 presents the percentages of the male market groups (totals and breakdowns by Composite Reserve Propensity) who answered "yes" to each of these items; parallel responses by the female market groups are presented in Table 7.6.

The older males were the most likely to believe that there is a Guard or Reserve unit located close enough for them to join (78 percent). Young males and older females were next most likely to believe this (70 percent and 67 percent, respectively). Young females were the least likely to assert this (57 percent). In general, then, larger percentages of the older groups said this than the same-gender young groups. In addition, young males expressing positive propensity were more likely to say that there is a conveniently close Guard/Reserve unit than were their negative propensity counterparts.

Table 7.5. Males' Beliefs About Guard/Reserve Participation

Item	Young Males			Older Males		
	Positive Reserve Propensity	Negative Reserve Propensity	Total	Positive Reserve Propensity	Negative Reserve Propensity	Total
<u>Proximity<sup>a</sup></u>						
There is a Guard/Reserve unit close enough to join	75.2	68.9	70.2 (1.2)	81.9	76.9	77.6 (1.4)
<u>Laws<sup>b</sup></u>						
Laws protect Guard/Reserve members from losing job/job seniority while training	47.3	42.3	43.2 (1.6)	57.2	50.5	51.4 (1.9)
<u>Job Effects<sup>b</sup></u>						
Employer would hold job open for 3-6 months (basic training)	51.9	45.0	46.3 (1.6)	52.2	44.0	45.0 (1.9)
Would lose job seniority while in (basic) training	33.2	37.2	36.4 (1.6)	33.7	30.5	31.0 (1.8)
Employer has policy about participation in Guard/Reserves	13.9	7.8	9.0 (0.8)	18.5	17.1	17.3 (1.5)
Employer is positive toward Guard/Reserve participation	34.8	25.2	27.0 (1.5)	43.1	31.5	33.0 (1.8)
Talked with supervisor about Guard/Reserve policy	10.7	3.5	4.8 (0.7)	11.4	3.9	4.8 (0.8)

Note: Tabled values are percentages answering yes to each question with standard errors in parentheses.

<sup>a</sup>Estimates based on interviews with 2,460 young males (554 with positive propensity and 1,906 with negative propensity) and 1,002 older males (142 with positive propensity and 860 with negative propensity).

<sup>b</sup>Questions asked only of employed (but not self-employed) respondents. Estimates based on interviews with 1,612 young males (316 with positive propensity and 1,296 with negative propensity) and 872 older males (115 with positive propensity and 757 with negative propensity).

Source: Questions 416, 430, 505, 507, 574-578, 582.

Table 7.6. Females' Beliefs About Guard/Reserve Participation

Item	Young Females			Older Females		
	Positive Reserve Propensity	Negative Reserve Propensity	Total	Positive Reserve Propensity	Negative Reserve Propensity	Total
<b>Proximity<sup>a</sup></b>						
There is a Guard/Reserve unit close enough to join	59.8	57.8	57.2 (1.3)	64.1	66.8	66.7 (2.8)
<b>Laws<sup>b</sup></b>						
Laws protect Guard/Reserve members from losing job/job seniority while training	38.9	48.3	39.7 (1.7)	48.4	45.5	45.6 (2.7)
<b>Job Effects<sup>b</sup></b>						
Employer would hold job open for 3-6 months (basic training)	42.8	37.8	38.2 (1.7)	44.1	48.8	48.1 (2.8)
Would lose job seniority while in (basic) training	42.8	48.4	48.5 (1.7)	35.2	41.3	41.1 (2.6)
Employer has policy about participation in Guard/Reserves	18.8	7.5	7.2 (8.9)	28.1	15.7	18.8 (2.1)
Employer is positive toward Guard/Reserve participation	32.8	28.2	21.1 (1.3)	43.3	28.7	27.2 (2.7)
Talked with supervisor about Guard/Reserve policy	3.6	2.4	2.5 (8.4)	4.1	2.1	2.2 (8.6)

Note: Tabled values are percentages answering yes to each question with standard errors in parentheses.

<sup>a</sup>Estimates based on interviews with 2,773 young females (253 with positive propensity and 2,528 with negative propensity) and 981 older females (38 with positive propensity and 943 with negative propensity).

<sup>b</sup>Questions asked only of employed (but not self-employed) respondents. Estimates based on interviews with 1,856 young females (136 with positive propensity and 1,728 with negative propensity) and 872 older females (27 with positive propensity and 845 with negative propensity).

Source: Questions 416, 438, 585, 587, 574-578B, 582.

Between two-fifths and one-half of the respondents believed that there are laws that protect them from loss of their jobs or seniority because of military training absences. Similar to the pattern observed earlier, older males were the most likely to believe this, followed by about equal percentages of young males and older females who made this assertion. The young females showed the lowest percentage of those that said such laws exist.

Guard/Reserve enlistment entails an initial basic training period of between 3 and 6 months. Between 38 and 46 percent of the employed respondents believed that their employers would hold their jobs open while they were in basic training. Both male groups were more likely to believe this (45-46 percent) than were the young females (38 percent), with older females falling between (40 percent). In addition, however, 31 to 41 percent believed that they would lose job seniority during their absence for basic training.

Relatively small percentages (7-17 percent) of respondents said that their employers have policies about participation in the Guard or Reserves. Older respondents were 8 percentage points more likely to believe this than were their same-gender, younger counterparts. On the other hand, it is encouraging to note that larger percentages of respondents said that their employers were positive toward Guard/Reserve participation. Once again, older males were the most likely (33 percent) and young females the least likely (21 percent) to say this. In addition, for all groups except older females, positive propensity respondents were more likely to assert this than their negative propensity counterparts. Finally, it appears that many of these beliefs may be based on supposition rather than solid information, given that only 5 percent of the males and 2 percent of the females said they had spoken to their supervisors about the employer's Guard/Reserve policy. This relationship is moderated by propensity among the males, however. Males who had spoken to their supervisors were more likely to express positive propensity (11 percent) than negative propensity (4 percent).

## 8. ADVERTISING EXPOSURE AND SERVICE IMAGES

People receive information about products, services, occupational options, etc. through a number of channels. One of the more passive of these channels, in terms of actual consumer involvement, is advertising. A major purpose of advertising is to create a positive product image by increasing consumer awareness and familiarity with the product. In this manner, different media, such as print, radio and television advertising, and direct mailings, are used to disseminate objective and subjective information and thus enhance the image of the "product" of military service. The expectation is that exposure to advertising, and the resultant increase in knowledge and awareness, will increase one's propensity to enlist, and the consequent probability of enlistment. This chapter examines young people's awareness of all forms of direct military advertising and their perceptions of the Services gleaned, at least partially, from such exposure.

### A. Exposure to Advertising

#### 1. Advertising Awareness

The 1987 YATS questionnaire included two measures of awareness of military advertising. Interviewees were first asked: "For which military Services do you recall seeing or hearing advertising that encouraged people to enlist in one or more of the Services?" Responses to this initial question are considered measures of "unaided awareness." The respondents were then asked whether they recalled advertising for each Service (specified by name) they had not mentioned in response to the initial question. These latter responses are considered measures of "aided awareness."

Table 8.1 presents the responses to these two sets of questions, as well as a combined measure indicating the total level of aided and unaided awareness. Additional data, broken down by propensity, are presented in Appendix C (Table C.8a for males and Table C.8b for females). Among the young males, unaided awareness of advertising by the four active Services ranges from 48 percent for the Navy to 73 percent for the Army. Unaided awareness of Coast Guard, National Guard/Reserve and Joint Services

Table 8.1 Levels of Awareness of Military Advertising

Sponsor/Awareness	Young Males (n=5,638)	Older Males (n=1,103)	Young Females (n=3,446)	Older Females (n=1,077)
Army				
Unaided awareness	72.7 (0.8)	69.3 (1.6)	70.3 (1.2)	67.2 (2.2)
Aided awareness	15.8 (0.6)	17.2 (1.3)	16.0 (1.1)	14.9 (1.7)
Aided or unaided	88.5 (0.6)	86.5 (1.2)	86.3 (0.9)	82.1 (1.8)
Navy				
Unaided awareness	47.9 (0.9)	44.0 (1.7)	44.3 (1.3)	44.5 (2.2)
Aided awareness	21.6 (0.7)	22.8 (1.5)	21.1 (1.2)	18.3 (1.9)
Aided or unaided	69.5 (0.8)	66.8 (1.6)	65.4 (1.2)	62.8 (1.9)
Marine Corps				
Unaided awareness	55.2 (0.9)	52.9 (1.7)	48.0 (1.3)	47.7 (2.1)
Aided awareness	21.9 (0.7)	22.6 (1.5)	21.5 (1.0)	20.6 (1.7)
Aided or unaided	77.1 (0.8)	75.5 (1.5)	69.6 (1.3)	68.3 (2.0)
Air Force				
Unaided awareness	56.4 (0.9)	52.6 (1.7)	49.1 (1.3)	47.1 (2.2)
Aided awareness	22.6 (0.7)	24.4 (1.5)	24.8 (1.2)	20.9 (1.6)
Aided or unaided	79.0 (0.7)	77.0 (1.5)	74.0 (1.2)	68.0 (2.0)
Coast Guard				
Unaided awareness	20.7 (0.7)	17.6 (1.3)	13.1 (0.8)	15.2 (1.8)
Aided awareness	18.8 (0.7)	20.8 (1.4)	17.0 (1.0)	16.5 (1.6)
Aided or unaided	39.5 (0.9)	38.3 (1.7)	30.1 (1.2)	31.7 (2.1)
National Guard/Reserve				
Unaided awareness	21.3 (0.7)	12.2 (1.1)	17.4 (0.9)	22.4 (1.8)
Aided awareness	33.9 (0.8)	34.2 (1.6)	27.6 (1.2)	25.2 (1.7)
Aided or unaided	55.2 (0.9)	46.4 (1.7)	45.0 (1.3)	47.6 (2.1)
Joint Services <sup>a</sup>				
Unaided awareness	12.2 (0.6)	21.6 (1.3)	10.6 (0.9)	9.0 (1.0)
Aided awareness	38.0 (0.9)	35.2 (1.7)	29.3 (1.1)	28.5 (1.9)
Aided or unaided	50.2 (0.9)	56.9 (1.7)	39.8 (1.3)	34.8 (2.0)

Note: Tabled values are percentages with standard errors in parentheses. Aided awareness is somewhat inversely related to unaided awareness in that respondents are only asked about it if they do not report unaided awareness for a given Service.

<sup>a</sup>Question refers to "one ad for Joint Services."

Source: Questions 601-608.

advertising was considerably lower, ranging from 12 percent for the Joint Services to 21 percent for both the Coast Guard and National Guard/Reserves. Among the older males, similar patterns are found for unaided awareness of the four active Services, ranging from 44 percent for the Navy to 69 percent for the Army. The older males also show higher unaided awareness of Joint Services advertising (22 percent), lower awareness of National Guard/Reserve advertising (12 percent), and similar awareness of Coast Guard advertising (18 percent) as do the young males.

Among both the young and older males, similar levels of aided awareness of advertising are noted for the four active Services and the Coast Guard, ranging from 16 to 24 percent. For the active Services, these levels of aided awareness represent one-quarter to one-half the levels of unaided awareness. For the Coast Guard, aided and unaided awareness levels are approximately equal. For both National Guard/Reserve and Joint Services advertising, however, males show higher levels of aided awareness, ranging from 34-38 percent, than they had shown of unaided awareness. In fact, in contrast to the pattern demonstrated for the active Services, levels of aided awareness of advertising by these two sponsors are between one and one-half to over three times the levels of unaided awareness for the same sponsor.

In this regard, it should also be noted that advertising awareness for the joint advertising program must be viewed in a different light than awareness for the active Services. The purpose of joint advertising is to supplement and complement the advertising efforts of the military Services. Joint advertising is not intended to be considered a "fifth Service." In fact, nowhere in the advertisements is "Joint Services" mentioned (although the advertisements do mention the "U.S. Armed Forces"), and when the individual Services are mentioned, the order of mention is rotated. Therefore, the relatively low levels of awareness of "Joint Services" advertising apparent in Table 8.1 are not necessarily an indication of ineffectiveness in reaching its target audience or providing a positive image of the Armed Forces. It is indeed likely that some portion of the advertising awareness of the military Services is the result of identifying (or misidentifying) Joint advertisements as ads for a specific Service. A



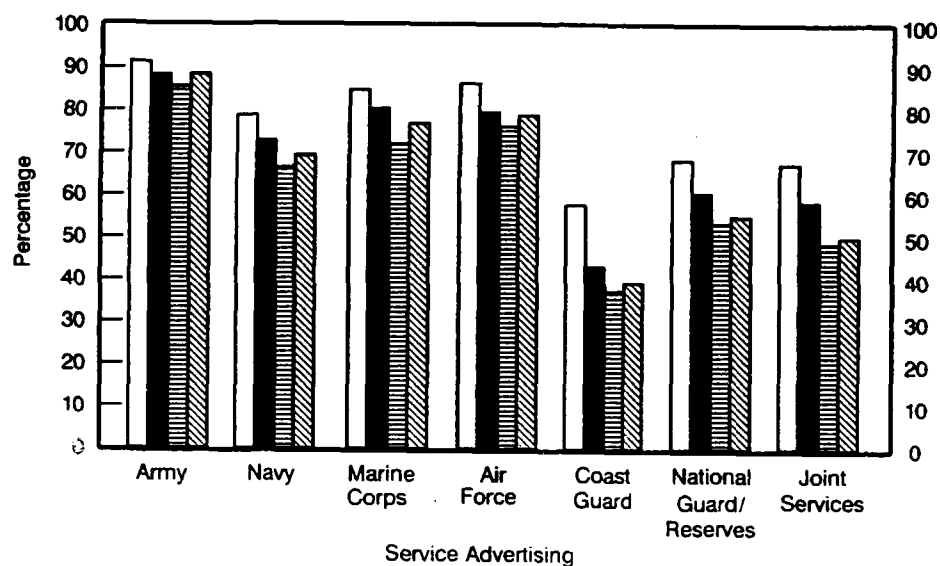
respondent may have seen the Army portion of a Joint advertisement, for example, and attributed the entire ad to the Army rather than to an ad for all the Services.





Young females' unaided awareness of advertising by the four active Services ranges from 44 percent for the Navy to 70 percent for the Army. For all except the Army, these levels are lower than those shown by young males. Unaided awareness of advertising by the remaining three sponsors is much lower, ranging from 11 percent for Joint Services advertising to 17 percent for the National Guard/Reserve. Older females show similar levels of unaided awareness for the active Services, with only the Army showing a higher level (67 percent) than the other three (which range from 45 to 48 percent). Their levels of unaided awareness for the Joint Services (9 percent) and Coast Guard (15 percent) do not differ from those of the young females. However, the older females' unaided awareness of National Guard/Reserve advertising is higher (22 percent) than that of their younger counterparts.

As was the case among the males, females' levels of aided awareness of advertising (16-25 percent among the young females and 15 to 21 percent for the older females) are considerably lower than unaided awareness levels for the comparable active Services. Among older females, similar levels of aided awareness and unaided awareness of advertising are found for both the Coast Guard and the National Guard/Reserve (approximately 16 percent and 24 percent, respectively), whereas among the young females, aided awareness of advertising by these two sponsors is higher (17 percent and 26 percent, respectively) than is unaided awareness. This latter pattern shown by the young females is similar to that shown by the males and is also seen in comparisons of awareness of Joint Services advertising for both sets of females. Here, aided awareness is about three times higher than unaided awareness.

Figures 8.1 and 8.2 present the combined aided and unaided advertising awareness levels for the young males and young females, respectively, for 1984 through 1987. Two basic conclusions can be drawn from examination of these tables. First, it is clear that the active Services, especially the Army, have higher awareness levels than the National Guard/Reserves, Joint Services, and the Coast Guard. Second, decreasing levels of advertising awareness for all advertisers is apparent from 1984 to 1986. For both

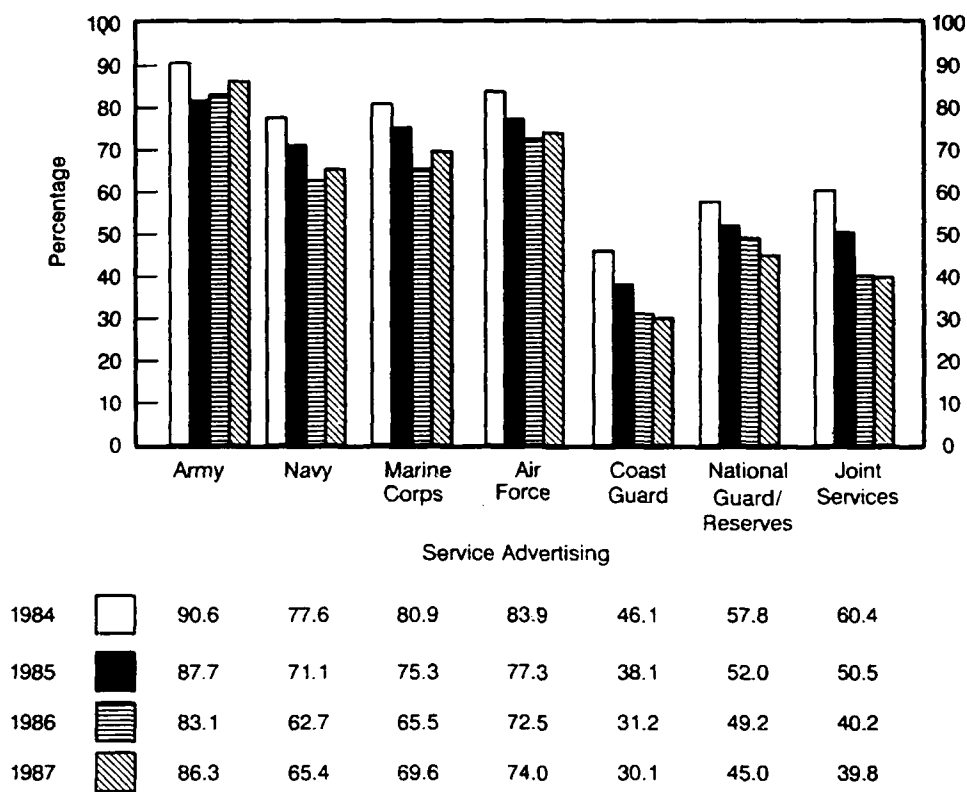
**Figure 8.1. Young Males' Aided and Unaided Awareness of Advertising, 1984-1987**



1984		91.5	79.0	85.0	86.6	57.9	68.5	67.5
1985		88.4	72.8	80.6	79.7	43.2	60.7	58.7
1986		85.6	66.6	72.1	76.4	37.5	53.6	48.8
1987		88.5	69.5	77.1	79.0	39.5	55.2	50.2

SOURCE: Questions 601-608

**Figure 8.2. Young Females' Aided and Unaided Awareness of Advertising, 1984-1987**



SOURCE: Questions 601-608

young males and young females, these decrements in advertising awareness for every one of the year-to-year comparisons for each advertiser were statistically significant. Among young males, however, 1987 saw a slight but significant increase in advertising awareness from 1986 for the four active Services. Among the young females, this 1986-1987 increase is significant for both the Army and the Marine Corps. At the same time, there is a small but significant decrease in awareness among the young females for advertising sponsored by the National Guard/Reserve.

Increases in cable television viewing, rental videos, and other changes in video media viewing habits as well as lower Service advertising budgets and increased advertising costs may explain the decline in levels of advertising awareness from 1984 to 1986. The differentially increased Service advertising budgets and more effective use of budget funds may explain the increase in advertising awareness for selected sponsors. The YATS data, however, do not provide the data to substantiate these speculations.

Table 8.2 presents the order in which the individual Services were mentioned in response to the initial, unaided question about advertising awareness. All of the market groups show nearly identical patterns regarding order of mention on the first response, and even the percentages citing each Service are extremely close. The most frequently mentioned first response was the Army (36-41 percent). The Air Force was mentioned second most frequently (23-30 percent) on the first response, while "Other" (which includes "none" and "don't know") was third (10-14 percent). For those individuals who offered a second response, the Army was again most frequently mentioned (35-42 percent). Finally, for individuals giving a third response, the Marine Corps was most likely to be mentioned (27-30 percent), with the Air Force and Coast Guard generally following closely.

## **2. Recognition of Military Advertising Slogans**

Recognition and identification of the sponsor of advertising slogans are more precise indicators of advertising awareness than simple self-reported exposure data. Respondents were read seven military slogans and were asked to name the sponsor of each. The Army, Navy, and Air Force each had one slogan, and the Marine Corps and Joint Services each had two.

Table 8.2. Order of Mention for Recall of Military Advertising

Service	Young Males			Older Males		
	First Response	Second Response	Third Response	First Response	Second Response	Third Response
Army	37.4	41.8	8.3	35.8	41.1	8.4
Navy	5.7	20.7	14.0	5.6	17.4	13.9
Marine Corps	9.4	15.0	29.0	8.7	17.4	29.7
Air Force	30.2	18.1	20.2	29.1	17.8	20.3
Coast Guard	0.6	1.2	24.7	0.7	2.4	24.4
National Guard/Reserve	2.2	2.6	2.9	4.3	3.5	2.1
One ad for all Services	4.3	0.7	0.9	4.6	0.4	1.2
Other <sup>a</sup>	10.4	0.0	0.0	11.0	0.0	0.0

Service	Young Females			Older Females		
	First Response	Second Response	Third Response	First Response	Second Response	Third Response
Army	40.7	35.1	9.9	37.7	34.7	12.4
Navy	6.2	22.4	17.0	8.8	19.6	16.8
Marine Corps	8.3	17.0	27.3	8.7	16.8	28.5
Air Force	22.9	19.2	21.8	23.5	20.4	14.5
Coast Guard	0.4	1.3	18.0	0.5	1.8	21.5
National Guard/Reserve	3.2	4.2	4.1	5.2	5.6	5.5
One ad for all Services	5.0	0.7	1.9	3.7	1.1	0.7
Other <sup>a</sup>	13.6	0.0	0.0	11.8	0.0	0.0

Note: Tabled values are column percentages. Data are for unaided mentions. Estimates are based on interviews with 5,642 young males, 1,103 older males, 3,448 young females and 1,078 older females.

<sup>a</sup>Includes "None" (first response only), don't know, and refused.

Source: Question 601.

The overall market group responses to these items are presented in Table 8.3. In addition, Tables C.9a (males) and C.9b (females) in Appendix C present the responses by propensity. In all of these tables, the correct sponsor for each slogan is underlined.

The three slogans with the highest levels of correct sponsor attribution were: "Aim high. \_\_\_\_." (Air Force), "Be all you can be." (Army), and "The few, the proud, the \_\_\_\_." (Marine Corps). Although the Army had achieved the highest levels of advertising awareness, the Air Force slogan was in general most likely to elicit the highest levels of correct sponsor attribution among all market groups.

For the Air Force slogan, the young males showed a significantly higher level of correct attributions (91 percent) than the older males (82 percent) who, in turn, were more accurate than the young females (78 percent) who, finally, were more accurate than the older females (71 percent). With regard to the Army slogan, young males were again more accurate (83 percent) than each of the other market groups, with the older males and young females showing equal levels of correct attributions (75 and 78 percent, respectively), and the older females again the least likely to provide the correct sponsor (69 percent). For the Marine Corps slogan, the young females were least accurate (65 percent), while the two male groups showed equal levels of accuracy (81-82 percent), and the older females fell in between these two anchors (73 percent).

The slogan that was fourth most likely to be accurately attributed to its sponsor was the second Marine Corps slogan: "We're looking for a few good men." Although between 67 and 68 percent of the male groups made the correct attribution for this slogan, it was correctly recognized by only 38 percent of the young females and 44 percent of the older females. Thus, the males were between one and one-half and one and three-fourths more likely to correctly attribute this slogan to its sponsor than were the females.

Both the Navy slogan ("\_\_\_\_. It's not just a job, it's an adventure.") and the Joint advertising slogan ("We're not a company--we're your country") were approximately equally likely to be next more accurately recognized. Among the males, the Navy slogan elicited slightly higher levels of accuracy, while the Joint Services slogan did this among the females. The Navy slogan was recognized correctly by between 31 and 33

Table 8.3. Correct and Incorrect Sponsor Attributions for Military Advertising Slogans

Slogan/Response	Young Males (n=5,641)	Older Males (n=1,103)	Young Females (n=3,447)	Older Females (n=1,077)
"Be all you can be."				
<u>Army</u>	82.7 (0.7)	74.6 (1.5)	78.0 (1.2)	69.2 (2.3)
Navy	3.8 (0.3)	5.2 (0.7)	4.4 (0.4)	5.6 (1.0)
Marine Corps	3.1 (0.3)	5.4 (0.8)	2.8 (0.4)	5.4 (1.0)
Air Force	3.7 (0.3)	5.3 (0.7)	5.0 (0.6)	6.8 (1.1)
Joint Services	3.9 (0.3)	4.2 (0.7)	5.4 (0.6)	4.6 (1.1)
Don't know	3.0 (0.3)	5.3 (0.8)	4.4 (0.7)	8.3 (2.0)
"_____. It's not just a job, it's an adventure."				
<u>Army</u>	35.6 (0.9)	34.2 (1.6)	35.5 (1.3)	32.3 (1.9)
Navy	31.1 (0.8)	33.3 (1.6)	21.8 (1.1)	24.1 (2.0)
Marine Corps	11.6 (0.6)	10.4 (1.1)	13.4 (0.8)	11.4 (1.1)
Air Force	8.3 (0.5)	11.0 (1.1)	11.4 (0.8)	15.0 (1.4)
Joint Services	6.3 (0.5)	4.7 (0.7)	6.9 (0.7)	4.9 (0.8)
Don't know	7.0 (0.4)	6.5 (0.9)	11.1 (0.9)	12.4 (1.8)
"The few, the proud, the _____."				
<u>Army</u>	4.3 (0.3)	4.3 (0.7)	8.2 (0.9)	5.2 (0.7)
Navy	4.2 (0.4)	2.9 (0.6)	6.4 (0.6)	5.7 (1.1)
<u>Marines</u>	80.9 (0.7)	81.6 (1.3)	65.0 (1.3)	73.3 (2.0)
Air Force	3.1 (0.3)	3.0 (0.6)	5.0 (0.6)	3.0 (0.6)
Joint Services	1.8 (0.2)	1.8 (0.5)	3.7 (0.5)	1.3 (0.4)
Don't know	5.8 (0.4)	6.5 (0.9)	11.6 (1.0)	11.5 (1.7)
"Aim high. _____."				
<u>Army</u>	2.5 (0.3)	2.9 (0.5)	6.5 (0.9)	6.2 (1.3)
Navy	1.9 (0.3)	3.6 (0.6)	3.6 (0.4)	5.3 (1.0)
Marine Corps	1.4 (0.2)	2.9 (0.6)	2.6 (0.3)	3.7 (0.6)
<u>Air Force</u>	90.7 (0.5)	82.4 (1.3)	77.8 (1.2)	70.8 (2.1)
Joint Services	0.4 (0.1)	1.2 (0.4)	1.1 (0.2)	1.8 (0.5)
Don't know	3.1 (0.3)	7.0 (0.9)	8.4 (0.8)	12.3 (1.7)
"It's a great place to start."				
<u>Army</u>	40.5 (0.9)	41.0 (1.7)	36.2 (1.4)	31.8 (2.0)
Navy	14.1 (0.6)	18.0 (1.3)	13.0 (0.8)	15.5 (1.5)
Marine Corps	7.2 (0.5)	4.5 (0.7)	9.6 (0.8)	6.2 (0.7)
Air Force	11.2 (0.6)	12.3 (1.1)	10.9 (0.8)	10.6 (1.5)
<u>Joint Services</u>	15.1 (0.7)	11.7 (1.1)	12.0 (0.8)	13.4 (1.6)
Don't know	11.9 (0.6)	12.5 (1.2)	18.4 (0.9)	22.5 (1.7)
"We're looking for a few good men."				
<u>Army</u>	13.8 (0.6)	15.0 (1.2)	21.6 (1.0)	23.5 (1.8)
Navy	6.9 (0.4)	4.9 (0.7)	14.8 (1.1)	11.0 (1.7)
<u>Marine Corps</u>	67.3 (0.8)	67.5 (1.6)	38.0 (1.3)	43.8 (2.1)
Air Force	3.3 (0.3)	3.2 (0.6)	6.4 (0.8)	4.5 (0.7)
Joint Services	3.3 (0.4)	3.3 (0.6)	5.4 (0.5)	5.1 (0.7)
Don't know	5.3 (0.4)	6.0 (0.9)	13.9 (0.8)	12.1 (1.2)
"We're not a company—we're your country."				
<u>Army</u>	19.5 (0.7)	22.2 (1.4)	17.7 (1.0)	17.8 (1.5)
Navy	10.5 (1.1)	8.3 (1.0)	10.3 (0.9)	9.8 (1.6)
Marine Corps	9.3 (0.5)	8.0 (0.9)	10.6 (0.8)	9.1 (0.9)
Air Force	6.3 (0.4)	7.0 (0.8)	5.8 (0.6)	4.5 (0.7)
<u>Joint Services</u>	33.2 (0.9)	29.1 (1.6)	25.0 (1.1)	23.6 (2.0)
Don't know	21.3 (0.7)	25.4 (1.5)	30.6 (1.2)	35.2 (2.0)

Note: Tabled values are column percentages with standard errors in parentheses. The sponsor for each slogan is underlined.

Source: Questions 610-615.

percent of the males and between 22 and 24 percent of the females. Greater percentages of each group (significantly greater for all market groups except the older males), in fact, incorrectly attributed the Navy slogan to the Army (percentages ranged from 32 to 36 percent).

"We're not a company--we're your country" elicited between 24 and 33 percent of respondents making the correct attribution to the Joint Services. Young males were most accurate, followed by older males, with young and older females the least likely to correctly identify the sponsor. In addition, between 21 percent and 35 percent of individuals responded that they did not know the sponsor of this slogan. Finally, this particular slogan produced the widest dispersion of responses to each of the four individual Services.

As was the case with advertising awareness, attribution of the two Joint advertising slogans should be viewed differently from the Service-specific slogans. As noted earlier, the Joint advertising program is intended to supplement and complement the efforts of the military Services. Accordingly, the relatively low levels of correct attribution to Joint Services of their slogans, "We're not a company-- we're your country" (24-33 percent) and "It's a great place to start" (12-15 percent) should not be interpreted to mean that they are not making the desired impact.

Compared to the Service-specific slogans, however, both of the Joint advertising slogans produced the highest percentages of "don't know" responses. As already mentioned, "We're not a company--we're your country" produced the widest dispersion of response among the four individual Services. The dispersion demonstrated for this newer slogan suggests a fair amount of confusion among the respondents. In other words, they may recall the slogan but not the context in which they heard or saw it. This further suggests that Joint advertising is not coming across as competing with advertising for the individual Services but is, in fact, "complementing and supplementing" the individual Service campaigns.

"It's a great place to start" produced the lowest levels of accurate attributions to the Joint Services, its sponsor. In addition to the second highest levels of "don't know," this slogan also elicited the largest percentages of incorrect attributions to one particular (incorrect) Service, namely, the Army. Forty-one percent of the males and 32-36 percent of the females made this mistaken attribution.



### 3. Awareness of Print and Broadcast Advertising

Respondents were asked whether they had seen, within the past 12 months, any print advertising (i.e., magazines, newspapers, or on billboards) for the military, and whether they recalled seeing any broadcast advertising (television or radio) for the military. If they answered that they had, they were further queried regarding the Services about which they had seen or heard this type of advertising. Tables 8.4 and 8.5 present their responses to these questions, by market group and propensity, for print and broadcast advertising, respectively.

Table 8.4 shows that young males were most likely to have reported seeing print advertising for the military in the past 12 months (78 percent). Both older males and young females were significantly less likely to report this (69 percent). Older females were the least likely to report having seen such advertising (64 percent). The Army was most likely to be mentioned as the subject of the print advertising seen (42-55 percent). This result is completely consistent with results discussed thus far and is consonant with the Army's large advertising budget. Among the young males, the Air Force was mentioned second most often, followed by the Marine Corps and then the Navy. Among the older males and young females, both the Marine Corps, and the Air Force were next most likely to be mentioned after the Army, with the Navy trailing behind these two. For the older females, the Navy, Marine Corps and Air Force were equally likely to be mentioned after the Army. For all market groups, reporting of having seen print advertising for the National Guard/Reserve or the Joint Services was equally unlikely (between 5 and 8 percent). The few significant differences that are seen as a function of propensity indicate that individuals expressing positive propensity are more likely to report having seen print advertising for the military in the past 12 months than their negative propensity counterparts.

Table 8.5 presents analogous data for reporting of having seen or heard broadcast advertising in the past 12 months. Similar percentages of the four market groups made this report, ranging from a high of 86 percent of the young males to a low of 83 percent of the older females. Only the young male level differed at all from any of the other groups--the females.

Table 8.4. Awareness of Print Media Advertising

Advertising Medium/Sponsor	Young Males			Older Males		
	Positive Propensity (n=1,868)	Negative Propensity (n=3,752)	Total (n=5,620)	Positive Propensity (n=172)	Negative Propensity (n=929)	Total (n=1,101)
Saw Print Advertising <sup>a</sup> of:						
Army	56.3	54.1	54.8 (0.9)	40.8	47.0	46.0 (1.7)
Navy	34.6	32.5	33.2 (0.8)	26.5	27.0	26.9 (1.5)
Marine Corps	41.8	39.4	40.2 (0.9)	30.8	35.2	34.5 (1.6)
Air Force	45.9	41.8	43.1 (0.9)	35.9	32.5	33.1 (1.6)
National Guard/Reserve <sup>b</sup>	6.8	7.9	7.6 (0.5)	9.4	6.5	6.9 (0.9)
Joint Services <sup>c</sup>	7.2	9.0	8.4 (0.5)	5.8	6.7	6.6 (0.9)
Don't remember sponsor	1.4	1.8	1.7 (0.2)	2.9	3.6	3.5 (0.8)
Saw any print advertising	80.1	76.5	77.7 (0.8)	67.8	69.0	68.8 (1.6)
Advertising Medium/Sponsor	Young Females			Older Females		
	Positive Propensity (n=469)	Negative Propensity (n=2,958)	Total (n=3,427)	Positive Propensity (n=53)	Negative Propensity (n=1,014)	Total (n=1,067)
Saw Print Advertising <sup>a</sup> of:						
Army	57.5	49.1	50.4 (1.3)	42.3	42.0	42.0 (2.2)
Navy	20.0	23.7	23.1 (1.1)	32.9	23.8	24.2 (2.2)
Marine Corps	27.9	30.3	29.9 (1.2)	28.6	29.2	29.2 (2.2)
Air Force	33.8	28.2	29.0 (1.2)	46.5	25.5	26.5 (2.2)
National Guard/Reserve <sup>b</sup>	5.5	4.6	4.7 (0.5)	7.3	8.4	8.3 (1.7)
Joint Services <sup>c</sup>	5.0	5.6	5.5 (0.6)	8.8	6.5	6.6 (1.4)
Don't remember sponsor	1.8	2.7	2.5 (0.4)	4.7	3.9	4.0 (0.5)
Saw any print advertising	73.9	68.5	69.3 (1.2)	68.4	63.7	63.9 (1.9)

Note: Tabled values are column percentages with standard errors in parentheses.

<sup>a</sup>Refers to the past 12 months.

<sup>b</sup>Propensity estimates refer to Composite Reserve Propensity; all other estimates refer to Composite Active Propensity.

<sup>c</sup>"Joint Services" represents the Joint Recruiting Advertising Program.

Source: Questions 505, 507, 510-513, 616, 617.

Table 8.5. Awareness of Broadcast Media Advertising

Advertising Medium/Sponsor	Young Males			Older Males		
	Positive Propensity (n=1,869)	Negative Propensity (n=3,748)	Total (n=5,617)	Positive Propensity (n=172)	Negative Propensity (n=921)	Total (n=1,093)
Saw/Heard Broadcast Advertising <sup>a</sup> of:						
Army	68.7	68.4	68.5 (0.8)	63.4	64.2	64.1 (1.6)
Navy	47.4	47.8	47.6 (0.9)	41.7	45.2	44.6 (1.7)
Marine Corps	55.3	55.9	55.7 (0.9)	59.7	51.6	52.9 (1.7)
Air Force	56.8	53.4	54.5 (0.9)	57.3	48.9	50.3 (1.7)
National Guard/Reserve <sup>b</sup>	12.2	12.7	12.6 (0.6)	17.9	14.1	14.6 (1.2)
Joint Services <sup>c</sup>	15.4	16.4	16.1 (0.6)	10.2	18.2	16.9 (1.3)
Don't remember sponsor	0.4	0.7	0.6 (0.1)	0.4	0.6	0.6 (0.2)
Saw any broadcast advertising	86.9	85.8	86.2 (0.6)	86.3	83.8	84.2 (1.2)
Advertising Medium/Sponsor	Young Females			Older Females		
	Positive Propensity (n=474)	Negative Propensity (n=2,960)	Total (n=3,434)	Positive Propensity (n=53)	Negative Propensity (n=1,017)	Total (n=1,070)
Saw/Heard Broadcast Advertising <sup>a</sup> of:						
Army	67.5	64.7	65.1 (1.3)	69.6	62.5	62.8 (2.0)
Navy	41.7	38.0	38.5 (1.3)	34.5	42.1	41.8 (2.2)
Marine Corps	44.6	45.0	45.0 (1.3)	36.3	48.1	47.5 (2.1)
Air Force	44.9	47.0	46.7 (1.3)	52.3	44.5	44.9 (2.1)
National Guard/Reserve <sup>b</sup>	12.5	7.6	8.0 (0.6)	11.3	8.7	8.8 (0.9)
Joint Services <sup>c</sup>	9.0	13.8	13.1 (0.9)	8.9	13.0	12.8 (1.3)
Don't remember sponsor	1.2	1.4	1.4 (0.2)	2.8	2.6	2.6 (0.5)
Saw any broadcast advertising	84.7	83.6	83.8 (0.9)	86.3	82.6	82.8 (1.5)

Note: Tabled values are column percentages with standard errors in parentheses.

<sup>a</sup>Refers to the past 12 months.

<sup>b</sup>Propensity estimates refer to Composite Reserve Propensity; all other estimates refer to Composite Active Propensity.

<sup>c</sup>"Joint Services" represents the Joint Recruiting Advertising Program.

Source: Questions 505, 507, 510-513, 618, 619.

With regard to the subject of the broadcast advertising, the Army again elicited the highest percentages (63-69 percent). For all groups except the older females, both the Marine Corps and the Air Force were next most likely to be mentioned, followed by the Navy. For the older females, there were no differences in the likelihood of either the Navy, Marine Corps or Air Force being mentioned. For all market groups except the older males, the National Guard/Reserve was least likely to be mentioned; for the older males, it was just as likely to be mentioned as was the Joint Services.

Finally, inspection of these two tables reveals that respondents were consistently more likely to report having seen or heard broadcast advertising than having seen print media advertising for the military.

#### 4. Receipt of Recruiting Literature

The young male and young female market groups were asked whether they had received any unsolicited military recruiting literature in the mail in the past 12 months, and, if so, from what Service. Table 8.6 presents the responses to this question by propensity. Young males were twice as likely to report having received recruiting literature from any Service (45 percent) as were young females (23 percent). Consistent with previous years' results, both young males and young females expressing negative propensity were more likely to have received such literature than their counterparts expressing positive propensity. Both market groups cited the Army most frequently as the source of the recruiting literature (27 percent for males and 13 percent for females). Among the young males, the Navy and the Marine Corps were next most frequently mentioned (20 percent), followed by the Air Force (16 percent). Less than 5 percent said that they had received any literature sponsored either by the National Guard/Reserve or the Joint Services. Among the young females, the Air Force was next most frequently mentioned (7 percent) after the Army, with the Navy and Marine Corps, as well as the Guard/Reserve and Joint Services, each being mentioned by less than 5 percent of the respondents.

Table 8.6. Reported Receipt of Recruiting Literature<sup>a</sup>

Sponsor	Young Males			Young Females		
	Positive Propensity (n=1,870)	Negative Propensity (n=3,753)	Total (n=5,623)	Positive Propensity (n=473)	Negative Propensity (n=2,953)	Total (n=3,426)
Army	21.3	30.4	27.4 (0.8)	9.6	13.6	13.0 (0.9)
Navy	18.0	20.6	19.7 (0.7)	3.4	3.8	3.7 (0.4)
Marine Corps	16.8	21.8	20.2 (0.7)	4.1	2.9	3.1 (0.3)
Air Force	13.2	18.0	16.4 (0.6)	7.5	7.2	7.2 (0.5)
National Guard/Reserve <sup>b</sup>	4.3	3.5	3.7 (0.3)	0.7	1.5	1.4 (0.2)
Joint Services <sup>c</sup>	1.5	3.5	2.8 (0.3)	0.2	0.5	0.5 (0.1)
Don't remember sponsor	0.4	1.8	1.4 (0.2)	0.0	2.7	2.3 (0.4)
Any recruiting literature	39.9	47.8	45.3 (0.9)	15.8	24.0	22.8 (1.1)

Note: Tabulated values are column percentages with standard errors in parentheses.

<sup>a</sup>Refers to the past 12 months.

<sup>b</sup>Propensity estimates refer to Composite Reserve Propensity; all other estimates refer to Composite Active Propensity.

<sup>c</sup>"Joint Services" represents the Joint Recruiting Advertising Program.

Source: Questions 510-513, 620, 621.

## B. Service Images

A series of questions about the images that respondents have of the four active Services that was first asked in 1986 was again asked in 1987. Specifically, respondents were asked "Which one Service do you think of first when I mention..." before each of ten image statements was read to them. The ten statements and responses are presented in Table 8.7 for the young market groups and Table 8.8 for the older market groups. In addition, propensity breakdowns for these items are presented in Tables C.10a and C.10b in Appendix C.

The response patterns across the four market groups are relatively consistent and suggest that the images of the different Services are not a function of either age or gender. The data also indicate that when people think about the Services, the first Service that generally comes to mind is the Army. For example, for young males and young females, the Army came to mind first for five of the image statements. These images were:

- provides money for education;
- opportunities for promotion and advancement;
- equal pay and advancement for men and women;
- defending your country; and
- work in or near a combat zone.

The finding that half of the images examined were associated with the Army may simply be a result of the higher levels of Army advertising, compared with the other Services. Certainly, the Army has emphasized heavily its educational benefits in the past couple of years, thereby encouraging substantially the image of "provides money for education."

These market groups also mentioned the Army frequently in combination with other Services in response to other, additional image statements. Young females were most likely to mention the Army first in response to "teaches valuable skills and trades" and mentioned the Army equally often as the Navy and Marine Corps for "assignment to work that does not prepare you for a civilian career." Young males mentioned the Army as frequently as the Air Force for "teaches valuable skills and trades."

The older market groups, especially the older males, were not quite as likely to have the Army as their first and clearly dominant response to as many image statements as were the younger groups. However, both older

Table 8.7. First Service Mentioned in Response to Service Image Statements for Young Males and Females

Market/Statement	Army	Navy	Marine Corps	Air Force	None/Refused	Don't Know
<u>Young Males</u>						
Provides money for education	59.1	12.5	8.6	14.4	3.3	2.2
Lack of personal freedom	18.6	19.0	41.8	6.2	9.7	4.7
Teaches valuable skills and trades	33.2	17.5	13.2	31.0	3.3	1.9
Extended duty away from immediate family	19.0	46.8	18.9	8.5	4.3	2.6
Opportunities for promotion and advancement	35.6	15.5	13.0	28.6	4.8	2.6
Equal pay and advancement for men and women	47.9	14.4	7.6	20.6	6.2	3.3
Assignment to work that does not prepare you for a civilian career	21.5	17.4	31.2	11.5	13.1	5.4
Defending your country	40.4	7.7	36.8	9.9	3.5	1.7
Working in a high-technology environment	12.5	16.5	6.7	60.7	2.2	1.4
Work in or near a combat zone	44.0	7.6	39.5	5.0	2.5	1.5
<u>Young Females</u>						
Provides money for education	53.9	12.2	10.5	16.2	3.9	3.3
Lack of personal freedom	24.4	21.5	31.2	7.6	10.4	4.9
Teaches valuable skills and trades	33.2	16.0	14.1	29.4	4.1	3.2
Extended duty away from immediate family	24.4	35.3	20.0	12.5	4.5	3.2
Opportunities for promotion and advancement	32.9	14.4	15.1	28.3	5.9	3.5
Equal pay and advancement for men and women	45.3	14.0	9.6	18.6	7.7	4.9
Assignment to work that does not prepare you for a civilian career	22.0	20.1	23.2	14.7	13.8	6.2
Defending your country	57.2	8.4	20.9	8.9	2.4	2.3
Working in a high-technology environment	11.9	16.2	11.2	56.0	2.3	2.5
Work in or near a combat zone	56.9	9.8	21.9	6.5	2.1	2.8

Note: Tabled values are row percentages. Estimates are based on interviews with 5,642 young males and 3,448 young females.

Source: Questions 650-659.

Table 8.8. First Service Mentioned in Response to Service Image Statements for Older Males and Females

Market/Statement	Army	Navy	Marine Corps	Air Force	None/Refused	Don't Know
<u>Older Males</u>						
Provides money for education	51.4	11.7	8.2	21.8	3.7	3.2
Lack of personal freedom	15.4	25.3	41.4	6.4	7.2	4.4
Teaches valuable skills and trades	27.1	19.4	10.6	36.8	2.7	3.4
Extended duty away from immediate family	14.7	50.8	19.6	6.9	4.5	3.5
Opportunities for promotion and advancement	29.3	15.7	11.8	34.0	5.1	4.2
Equal pay and advancement for men and women	46.6	16.1	7.8	19.8	5.1	4.6
Assignment to work that does not prepare you for a civilian career	25.8	15.5	31.6	10.3	11.3	5.7
Defending your country	34.0	7.3	42.9	10.4	2.7	2.5
Working in a high-technology environment	8.8	18.7	6.1	62.3	1.8	2.2
Work in or near a combat zone	39.5	9.3	43.6	3.5	1.5	2.6
<u>Older Females</u>						
Provides money for education	48.4	15.1	11.4	17.1	3.8	4.2
Lack of personal freedom	23.9	18.2	35.4	7.6	9.4	5.6
Teaches valuable skills and trades	28.6	15.5	13.1	34.8	4.5	3.4
Extended duty away from immediate family	21.1	41.6	19.7	9.9	3.7	4.0
Opportunities for promotion and advancement	27.6	14.9	15.6	30.3	5.4	6.2
Equal pay and advancement for men and women	40.9	15.1	8.9	21.1	9.1	4.9
Assignment to work that does not prepare you for a civilian career	19.5	19.5	24.3	13.8	15.0	8.0
Defending your country	51.4	10.2	22.6	9.4	3.6	2.9
Working in a high-technology environment	9.2	20.7	8.1	57.3	2.2	2.5
Work in or near a combat zone	53.2	9.4	27.0	5.3	2.3	2.9

Note: Tabled values are row percentages. Estimates are based on interviews with 1,103 older males and 1,078 older females.

Source: Questions 650-659.



groups concurred with their young counterparts with regard to: provides money for education and equal pay and advancement for men and women. Older males were equally likely to mention either the Army or the Marine Corps in response to "work in or near a combat zone," whereas older females were most likely to give the Army as their first response to this statement. Older females also most frequently cited the Army in response to "defending your country." In addition, older females mentioned the Army equally as often as the Air Force with regard to providing "opportunities for promotion and advancement," and equally with the Navy and Marine Corps for "assignment to work that does not prepare you for a civilian career."

When asked about working in a high-technology environment, all market groups were most likely to mention the Air Force first. The two older groups were most likely to mention the Air Force first when asked about the provision of valuable skills and trades, and the older males thought of the Air Force first in response to opportunities for promotion and advancement.

The Navy was thought of first by all groups in response to the statement about extended duty away from one's immediate family. Finally, the Marine Corps received the most first mentions by all market groups with regard to the statement about lack of personal freedom. In addition, older males were most likely to mention the Marine Corps first for defending one's country and assignment to work that does not prepare you for a civilian career.

It is also worthwhile noting that significant minorities of all market groups (11-15 percent) responded "None" (or refused to answer) regarding the statement about assignment to work that does not prepare one for a civilian career. Somewhat smaller percentages (7 percent of the older males and 9-10 percent of the other groups) responded similarly to the statement about lack of personal freedom. Another 5 to 8 percent of the market groups responded "Don't Know" to these two items. Part of this uncertainty is likely a result of (1) lack of substantive knowledge about what people really do (as jobs) in the different Services (except perhaps for the Air Force, where it is known that at least some people fly airplanes), and (2) the realization that a certain degree of restriction of one's personal freedom is an integral and necessary part of operating an effective Armed Forces and is thus common to all the Services.

## 9. INFORMATION-SEEKING ACTIVITIES AND ACTIVE PROPENSITY

The conceptual utility of classifying information exposure and seeking activities as lying along a passive to active continuum has been discussed in past YATS II reports. The concept of an individual in the passive position of this continuum, examined in Chapter 8, is that of a relatively uninvolved receiver and processor of data. In this chapter, the active portion of the continuum is investigated. This includes the extent to which young adults use mail, telephone and school-based computerized information systems to obtain information about the military, discuss military service with others and take the Armed Services Vocational Aptitude Battery.

### A. Information-Seeking by Mail and Telephone

Calling a toll-free number and mailing a postcard or coupon for information about the military are moderately active behaviors. Table 9.1 presents the percentages of young respondents who reported having made a toll-free call or having mailed a postcard or coupon in the past 12 months.

About 10 percent of the young males and 4 percent of the young females, overall, reported mailing a postcard or coupon to get information about the military. Significantly smaller percentages of each group (4 percent and 2 percent, respectively) reported having made a toll-free call for this purpose in the past 12 months. Young males were more likely to have taken either such action than young females.

Positive propensity respondents in both market groups were much more likely than negative propensity respondents to have taken either of these information-seeking actions. The effect of propensity is stronger for having mailed a postcard or coupon than for having made a toll-free call.

The males were equally likely to call or write for information about any of the four individual Services, whereas the females were more likely to call or send for information about the Army or the Air Force. The Joint Services and Reserve Components were least likely to be the subjects of telephone and mail queries. Overall, however, few respondents, even those with positive propensity, used the mail and telephone systems to obtain information about the military.

Table 9.1. Information-Seeking by Mail and Telephone

Information-Seeking Activity/Service	Young Males			Young Females		
	Positive Propensity (n = 1,873)	Negative Propensity (n = 3,784)	Total (n = 3,637)	Positive Propensity (n = 476)	Negative Propensity (n = 2,969)	Total (n = 3,445)
<u>Made a toll-free call for information about:</u>						
Army	1.3 (0.3)	0.7 (0.1)	0.9 (0.1)	2.2 (0.7)	0.3 (0.1)	0.6 (0.1)
Navy	2.2 (0.5)	0.5 (0.1)	1.1 (0.2)	1.6 (0.5)	0.1 (0.1)	0.3 (0.1)
Marine Corps	1.7 (0.4)	0.4 (0.1)	0.8 (0.1)	0.5 (0.3)	0.1 (**)	0.1 (0.1)
Air Force	2.2 (0.6)	0.7 (0.2)	1.2 (0.2)	3.0 (1.0)	0.3 (0.1)	0.7 (0.2)
National Guard/Reserve <sup>a</sup>	0.4 (0.2)	0.2 (0.1)	0.2 (0.1)	0.9 (0.6)	0.2 (0.1)	0.3 (0.1)
Joint Services	0.0 (**)	0.0 (**)	0.1 (0.1)	0.0 (**)	0.0 (**)	0.0 (**)
Don't remember Service	0.0 (**)	0.0 (**)	0.0 (**)	0.0 (**)	0.1 (0.1)	0.0 (**)
Made any toll-free call	7.0 (0.9)	2.0 (0.3)	3.6 (0.3)	7.6 (1.5)	0.8 (1.5)	1.8 (0.3)
<u>Mailed a postcard or coupon for information about:</u>						
Army	6.3 (0.7)	2.6 (0.3)	3.8 (0.3)	5.0 (1.1)	1.0 (0.2)	1.6 (0.2)
Navy	5.6 (0.6)	2.0 (0.3)	3.2 (0.3)	2.7 (0.8)	0.4 (0.1)	0.8 (0.2)
Marine Corps	5.1 (0.6)	1.4 (0.2)	2.6 (0.2)	2.6 (0.8)	0.2 (0.1)	0.5 (0.1)
Air Force	6.4 (0.7)	1.7 (0.2)	3.2 (0.3)	7.1 (1.3)	0.8 (0.2)	1.8 (0.3)
National Guard/Reserve <sup>a</sup>	1.1 (0.4)	0.3 (0.1)	0.5 (0.1)	0.6 (0.4)	0.1 (0.1)	0.1 (0.1)
Joint Services	0.3 (0.1)	0.1 (0.1)	0.2 (0.1)	0.0 (**)	0.1 (0.1)	0.1 (**)
Don't remember Service	0.0 (**)	0.0 (**)	0.0 (**)	0.4 (0.3)	0.0 (**)	0.1 (**)
Made any mailed request	17.7 (1.1)	5.8 (0.4)	9.7 (0.5)	13.1 (1.8)	2.3 (0.3)	3.9 (0.4)

Note: Tabled values are column percentages with standard errors in parentheses. Items were not asked of older males or older females.

<sup>a</sup>Propensity estimates refer to Composite Reserve Propensity; all other estimates refer to Composite Active Propensity.

\*\*Informative standard error not available.

Source: Questions 505, 507, 510-513, 622, 623, 625, 626.

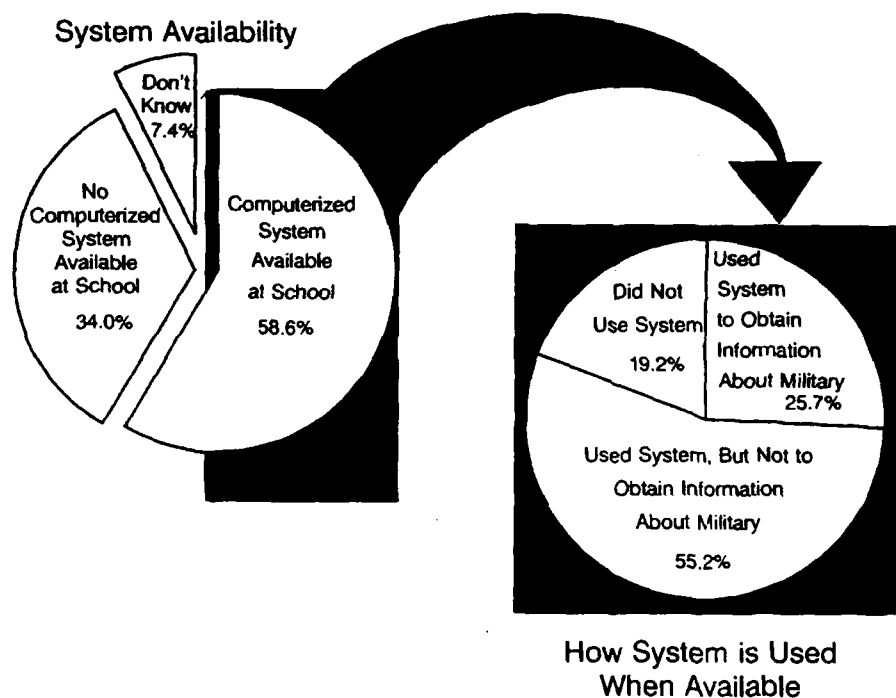
## **B. Use of Computerized Career Information Systems**

Three questions assessed the availability and use of school-based computerized career information systems by young males and young females to obtain information about the military. These groups were asked whether their high school had a computerized system for providing career information and, if so, whether they had ever used the system to obtain information about the military. The responses to these items are presented in Figure 9.1 for young males and Figure 9.2 for young females.

About three-fifths of each group reported that their school had such a career information system. Of these, about one-fourth of the young males and one-fifth of the young females had used the system to obtain information about the military. Among the young males, those expressing positive propensity were more likely to have used the system for this purpose than those expressing negative propensity. Over half of the males and three-fifths of the females had also used the system for information-gathering--but not about the military; this was especially true of young males expressing negative propensity.

The percentages of positive and negative propensity respondents who reported that their interest in the military had increased as a result of using a computerized career information system at school in 1984 through 1987 are shown in Figure 9.3. Clearly, much larger percentages of positive propensity youths than of negative propensity youths reported increased interest. Among young males, two-thirds or more of those expressing positive propensity were characterized by this set of events, compared with about one-third or fewer of those expressing negative propensity. Young females show a slightly different pattern. Over the past four years, those expressing positive propensity have shown a decreasing tendency to report increased interest in the military as a function of using a computerized information system. Although 93 percent said this in 1984, only 50 percent did so in 1987. On the other hand, the percentages of negative propensity young females making this report remained fairly stable, and similar to the male percentages, from 1985 to 1987 (between 29 and 36 percent).

**Figure 9.1. Young Males' Use of School-Based Computerized Information Systems to Obtain Information About the Military**

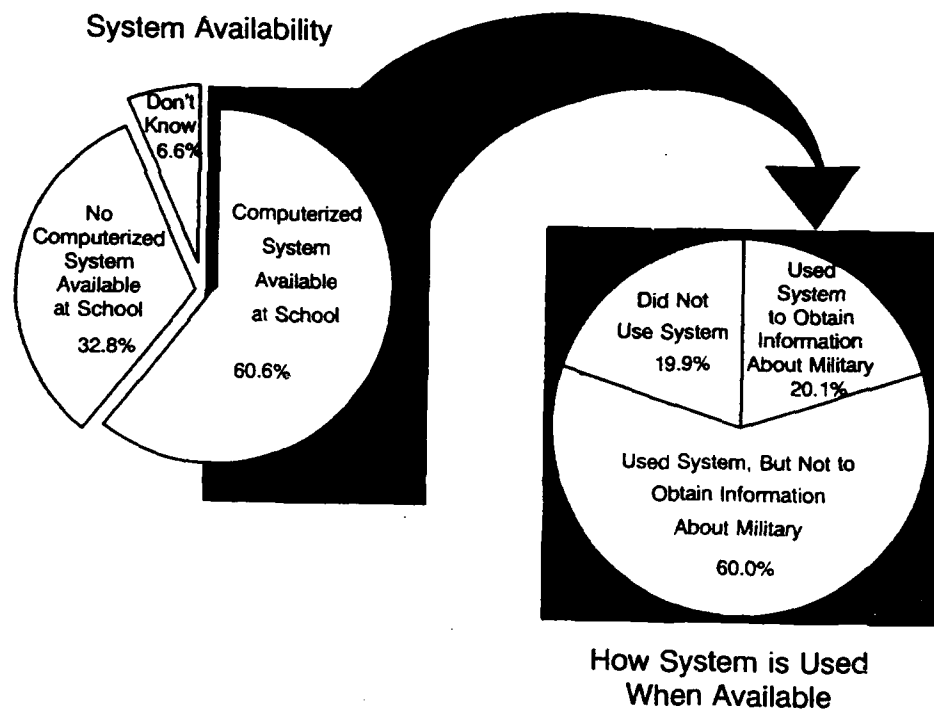


NOTE: Estimates on system availability are based on interviews with 5,585 young males.

Estimates on how the system was used are based on interviews with the 3,307 young males who had access to the system.

SOURCE: Question 710-711

**Figure 9.2. Young Females' Use of School-Based Computerized Information Systems to Obtain Information About the Military**

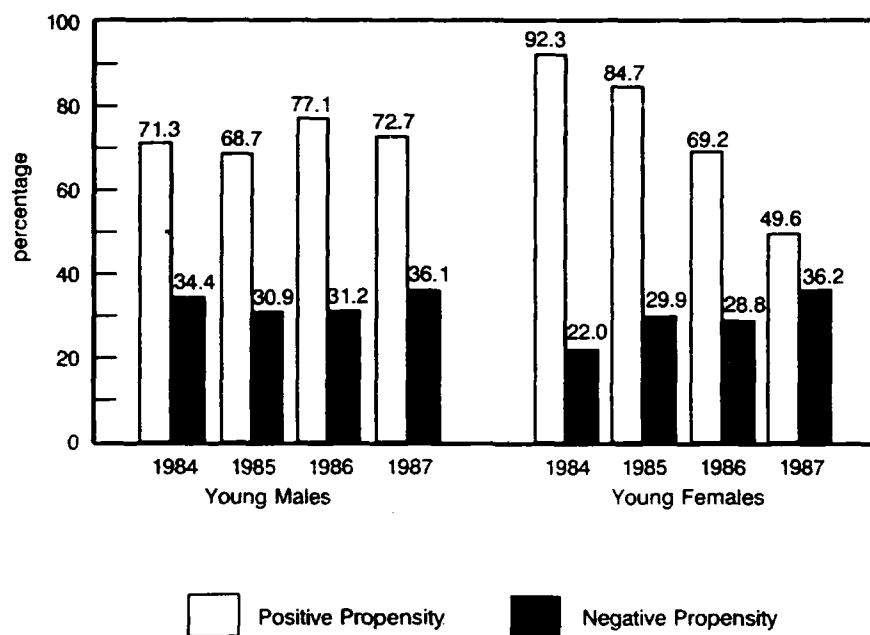


NOTE: Estimates on system availability are based on interviews with 3,419 young females.

Estimates on how the system was used are based on interviews with 2,036 young females who had access to the system.

SOURCE: Questions 710-711

**Figure 9.3. Increased Interest in the Military by Users of Computerized Information System, 1984-1987**



NOTE: Values represent the percentages of respondents who used a school computerized career information system to get information about the military and had their interest in the military consequently increased.

SOURCE: Questions 510-513, 711-712

### C. Informal Sources of Information

The three information-seeking activities discussed above require relatively little personal involvement. Broaching a subject such as military service with a family member, friend, or other confidant would presumably be more personally involving than using the telephone or a computer system or mailing a postcard or coupon. Thus, discussing military service with another person is an additional step along the active portion of a continuum of involvement.

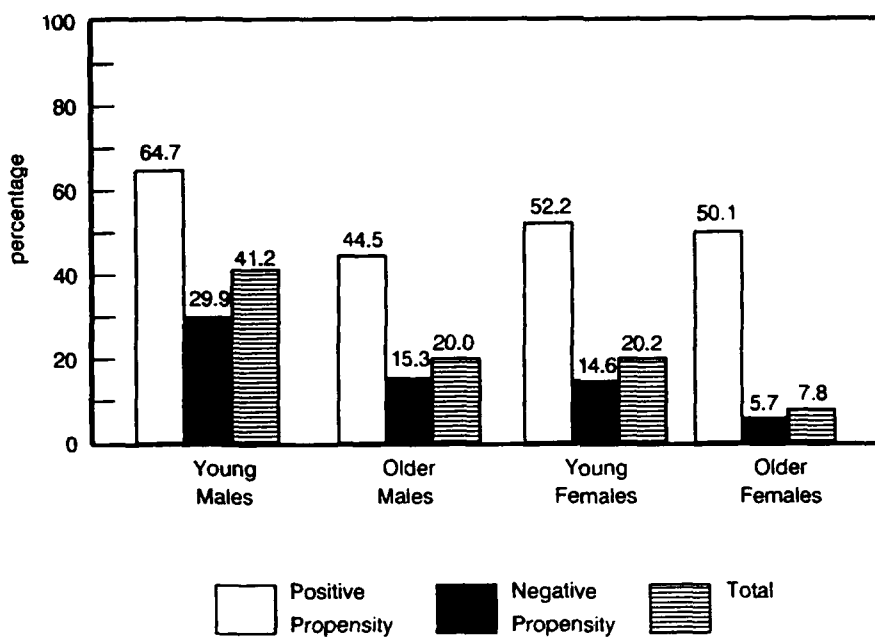
Figure 9.4 presents the percentages, overall and by propensity, of respondents in each market group who discussed military service with anyone during the past year or so. Young males were twice as likely as any other market group (41 percent versus 8-20 percent) to have had such a conversation. Older females were least likely to report this. Propensity is clearly associated with having had a conversation with someone about military service. In each market group, respondents expressing positive propensity were between 2 and 9 times more likely to report having had such a conversation than were their negative propensity counterparts.

Table 9.2 presents the results from two questions regarding the person with whom military service had been discussed. Both the individuals' relationship to the respondent as well as whether the individual is currently serving in the military are indicated. About half of the young market groups who said that they had had at least one such conversation reported that it had been with a family member who was not serving in the military. Another one-quarter said that they had discussed serving in the military with a friend not currently a member of the military, while similar percentages also said they had discussed the topic with a friend who was currently in the service. A final 23 to 27 percent of the young groups said that they had discussed the issue with a military recruiter.

Among the older males, a family member not in the military was most likely to have been a discussant (36 percent), followed by friends both in and not in the military (28-29 percent). Older females were most likely to report having had a discussion with a friend not in the military (41 percent), followed by a family member not in the military (31 percent). Overall, then, family members (not in the military) and friends (in general),



**Figure 9.4. Discussed Military Service with Anyone During the Past Year**



NOTE: Estimates for both older male and older female groups are for 22-24 year olds. Estimates are based on interviews with 5,637 young males (1,873 with positive propensity and 3,764 with negative propensity), 1,103 older males (172 with positive propensity and 931 with negative propensity), 3,441 young females (475 with positive propensity and 2,966 with negative propensity) and 1,078 older females (53 with positive propensity and 1,025 with negative propensity).

SOURCE: 510-513, 683

Table 9.2. With Whom Military Service Was Discussed

Response	Young Males			Older Males		
	Positive Propensity (n = 1,292)	Negative Propensity (n = 1,128)	Total (n = 2,330)	Positive Propensity (n = 79)	Negative Propensity (n = 144)	Total (n = 2,223)
Friends in military	27.1	27.9	27.5 (1.3)	25.0	30.2	28.3 (3.4)
Friends not in military	20.0	25.5	25.7 (1.3)	24.4	30.9	28.6 (3.5)
Family in military	13.2	9.1	11.2 (0.8)	13.5	10.3	11.4 (2.3)
Family not in military	54.9	47.3	51.2 (1.4)	50.6	27.6	35.9 (3.6)
Spouse <sup>a</sup> in military	0.1	0.0	0.0 ( ** )	1.1	0.0	0.4 (0.4)
Spouse <sup>a</sup> not in military	3.3	3.0	3.2 (0.4)	12.8	13.1	13.0 (2.7)
Military recruiter(s)	27.1	27.7	27.4 (1.2)	20.7	14.6	16.8 (3.0)
Other <sup>a</sup>	9.6	6.3	8.0 (0.8)	9.6	5.1	6.7 (1.9)

Response	Young Females			Older Females		
	Positive Propensity (n = 286)	Negative Propensity (n = 462)	Total (n = 748)	Positive Propensity (n = 25)	Negative Propensity (n = 52)	Total (n = 77)
Friends in military	21.2	22.3	21.9 (1.8)	14.8	21.8	19.7 (5.5)
Friends not in military	29.0	23.2	25.5 (2.0)	25.8	47.3	40.8 (9.8)
Family in military	20.7	13.3	16.1 (1.8)	30.6	8.8	15.4 (4.5)
Family not in military	57.6	48.1	51.8 (2.4)	40.8	27.0	31.0 (6.8)
Spouse <sup>a</sup> in military	2.3	2.5	2.4 (0.7)	0.0	2.8	2.0 (1.4)
Spouse <sup>a</sup> not in military	3.3	7.5	5.9 (1.1)	19.2	11.5	13.8 (4.4)
Military recruiter(s)	25.6	21.3	23.0 (2.1)	15.7	12.1	13.2 (4.1)
Other <sup>a</sup>	10.4	5.9	7.6 (1.3)	3.3	1.3	1.9 (1.4)

Note: Tabled values are percentages with standard errors in parentheses.

<sup>a</sup>Spouse<sup>a</sup> category includes spouse and boy/girlfriend.<sup>b</sup>Other<sup>a</sup> category includes teachers, school counselors, co-workers and employers.

Source: Questions 510-513, 683, 684A-B6.

and, among the younger groups, military recruiters were most likely to be consulted when the respondent talked with another person about military service.

**D. Armed Services Vocational Aptitude Battery (ASVAB) Testing**

Respondents were asked whether they had ever taken the Armed Services Vocational Aptitude Battery (ASVAB). If they had, they were asked where they took the test. Responses to these items are presented in Table 9.3. Not unexpectedly, given their greater number of years available, older males were more likely to have taken the ASVAB (29 percent) than young males (22 percent). Females, on the other hand, had the opposite pattern. Young females, although less likely to have taken the ASVAB (15 percent) than either male group, were more likely to have done so than the older females (10 percent). Among both of the older groups, respondents expressing positive propensity were more likely to have taken the ASVAB than their negative propensity counterparts.

The level of interest in military service indicated by taking the ASVAB may vary with the circumstances under which the test is taken. Taking the exam at school, where it is brought right to the individual, is much less active than taking it at a Military Entrance Processing Station (MEPS), to which the individual must travel as well as contact a recruiter. Both older males and older females were more likely to have taken the ASVAB at a MEPS (11 and 4 percent, respectively) than were their younger counterparts (4 and 1 percent, respectively). Young males and young females were more likely than their older counterparts to have taken the ASVAB at their high school (16 and 13 percent, respectively, versus 13 and 6 percent, respectively).

**E. Predicted AFQT and Information-Seeking Activities**

In this section, selected actions taken toward enlistment are examined in light of respondent quality--i.e., Predicted AFQT. Actions include mailing a postcard or coupon and making a toll-free call to obtain information about the military, discussing military service with someone and taking the ASVAB.

Table 9.3. Location Where Armed Services Vocational Aptitude Battery Was Taken

Test-Taking Status/ Location	Young Males			Older Males		
	Positive Propensity (n = 1,873)	Negative Propensity (n = 3,758)	Total (n = 5,631)	Positive Propensity (n = 171)	Negative Propensity (n = 923)	Total (n = 1,094)
Ever taken ASVAB	22.0	21.2	21.5 (0.7)	40.8	26.5	28.8 (1.5)
Taken at high school	15.5	16.3	16.0 (0.6)	14.8	12.4	12.8 (1.1)
Taken at Military Entrance Processing Station	4.8	3.6	4.0 (0.3)	19.2	9.9	11.4 (1.1)
Taken somewhere else	1.7	1.3	1.5 (0.2)	6.4	4.2	4.6 (0.7)

Test-Taking Status/ Location	Young Females			Older Females		
	Positive Propensity (n = 474)	Negative Propensity (n = 2,983)	Total (n = 3,437)	Positive Propensity (n = 53)	Negative Propensity (n = 1,019)	Total (n = 1,072)
Ever taken ASVAB	13.6	15.2	15.0 (0.9)	26.7	9.0	9.8 (1.0)
Taken at high school	10.0	13.6	13.0 (0.8)	15.9	5.0	5.5 (0.7)
Taken at Military Entrance Processing Station	2.7	1.2	1.4 (0.3)	10.8	3.5	3.8 (0.6)
Taken somewhere else	0.9	0.5	0.5 (0.1)	0.0	0.5	0.5 (0.2)

Note: Tabled values are column percentages with standard errors in parentheses.

Source: Questions 510-513, 645.

## 1. Young Males

Table 9.4 presents data about young males' actions taken toward enlistment. Three of the four possible actions show differences that are associated with educational status. Two of these sets of differences are parallel. Specifically, High School Seniors are most likely to have mailed a postcard or coupon requesting information about the military in the past 12 months and to have discussed military service with someone in the last year or so. Younger High School Students and High School Graduates do not differ from each other. Not surprisingly, these data indicate that between their junior and senior years individuals seek information on their options following high school graduation. Those who decide to enlist then are no longer eligible for the YATS II sample and do not appear in the High School Graduate category.

The time period for taking the ASVAB, in which educational status differences appeared, is not restricted to the past year. Therefore, the fact that High School Graduates are more likely than High School Seniors to have taken this action is not surprising. Included in this category, for example, are all the past High School Seniors who considered enlisting and took the ASVAB, but ultimately decided not to enlist. As in previous survey years High School Seniors were more likely to have taken the ASVAB than Younger High School Students. No differences are evident as a function of Predicted AFQT.

## 2. Young Females

Table 9.5 presents the data for the young females. Unlike the clear patterns evident among the young males, there were no general patterns in the females' reports of the likelihood of having taken any of the four actions toward enlistment. On the other hand, some scattered but consistent differences were found. Among young females in Category IIIB-V, for example, High School Seniors were more likely than either Young High School Students or High School Graduates to have mailed a postcard or coupon for information about the military in the past 12 months. Also, Category IIIB-V, High School Seniors were more likely than High School Graduates to have discussed military service with someone in the past year or so. In addition, High School Seniors (regardless of predicted AFQT) were more likely than Younger High School Students to have taken the

Table 9.4. Young Males' Information-Seeking Activities

Action Taken <sup>a</sup>	Predicted AFQT Group							
	High School Graduates (n=1,946)		High School Seniors (n=1,243)		Younger High School Students (n=1,477)		Non-Completers (n=971)	Total (n=6,631)
	Category I-III A	Category III B-V	Category I-III A	Category III B-V	Category I-III A	Category III B-V		
Mailed postcard or coupon	7.5	7.9	17.8	16.1	7.3	7.5	7.7	9.7
Made toll-free call	3.1	4.0	4.7	6.1	2.8	3.2	2.8	3.6
Discussed military service with someone	37.7	41.2	46.0	50.7	39.3	44.1	36.5	41.2
Ever took ASVAB	30.7	35.8	24.4	26.8	7.0	5.7	17.5	21.5

Note: Tabled values are cell percentages.

<sup>a</sup>Discussed service refers to "within the last year or so" and mailed card and made toll-free call refer to "within the last 12 months."

Source: Questions 622, 625, 645, 683.

Table 9.5. Young Females' Information-Seeking Activities

Action Taken <sup>a</sup>	Predicted AFQT Groups							
	High School Graduates (n=1,441)		High School Seniors (n=729)		Younger High School Students (n=755)		Non-Completers (n=516)	Total (n=3,437)
	Category I-III A	Category IIIB-V	Category I-III A	Category IIIB-V	Category I-III A	Category IIIB-V		
Mailed postcard or coupon	3.6	4.1	4.7	8.5	3.3	3.4	2.2	3.9
Made toll-free call	1.3	2.6	2.2	3.1	0.9	1.7	1.7	1.8
Discussed military service with someone	17.1	19.7	20.4	28.9	19.9	23.9	18.9	20.2
Ever took ASVAB	21.0	22.3	15.2	14.6	6.3	6.1	11.3	15.0

Note: Tabled values are cell percentages.

<sup>a</sup>Discussed service refers to "within the last year or so" and mailed card and made toll-free call refer to "within the last 12 months."

Source: Questions 622, 625, 645, 683.

ASVAB, while Category IIIB-V Seniors were less likely than their Graduate counterparts to have done so. These data, in a limited fashion, are consistent with the young male patterns discussed in the section above and the resulting conclusions.



## 10. RECRUITER CONTACT

The recruiter is probably the most visible representative of the Services in civilian life. Short of actually beginning the formal enlistment process, which necessitates having taken the ASVAB, talking with a recruiter is the most active step one can take in seeking information about military service. This chapter examines questions dealing with recruiter contact from both the market group and predicted AFQT perspectives. This examination includes the extent of contact, patterns of contact, visits to recruiting stations and differences between respondents who have contacted recruiters and those who have not.

### A. Recruiter Contact: The Market Group Perspective

#### 1. Extent of Contact

Respondents were asked whether they had ever contacted a military recruiter, which Service(s) the recruiter(s) represented, and how the contact initially had been made (e.g., by telephone, at school, at a recruiting station). The results, as a function of market group membership, are presented in Tables 10.1 and 10.2. Additional detailed data appear in Appendix C in Tables C.12a and C.12b.

Examination of Table 10.1 shows that, overall, between two-fifths and one-half of the males and between one-fifth and one-fourth of the females reported ever having talked with a recruiter from at least one of the four active Services to get information about the military. Of those reporting contact, the greatest percentage of each market group had talked with an Army recruiter (24-25 percent among the males and 12-14 percent among the females). Among the males, any of the remaining Services was equally as likely to be mentioned after the Army; among the females, Air Force and Navy recruiter contact were equally likely to be mentioned secondarily.

For the young males and young females, those expressing positive propensity were more likely to report recruiter contact--both overall and for each individual Service (except the Army among males)--than those expressing negative propensity. Those expressing positive propensity in the older market groups were also more likely to report seeing a recruiter from any Service. The pattern of the older groups' data for the individual Services is consistent with these results but, except for Army recruiter

Table 10.1 Any Contact with Recruiters by Service Represented

Service	Young Males			Older Males		
	Positive Propensity (n = 1,873)	Negative Propensity (n = 3,762)	Total (n = 5,635)	Positive Propensity (n = 172)	Negative Propensity (n = 931)	Total (n = 1,103)
Army	25.7	22.7	23.7 (0.7)	33.3	22.9	24.6 (1.5)
Navy	14.4	10.6	11.8 (0.6)	14.4	12.2	12.6 (1.1)
Marine Corps	15.5	11.2	12.6 (0.6)	17.0	12.4	13.2 (1.2)
Air Force	16.3	8.5	11.0 (0.5)	13.4	11.8	12.1 (1.1)
Any Military Recruiter	55.1	39.7	44.7 (0.9)	65.0	46.9	49.8 (1.7)

Service	Young Females			Older Females		
	Positive Propensity (n = 475)	Negative Propensity (n = 2,969)	Total (n = 3,444)	Positive Propensity (n = 53)	Negative Propensity (n = 1,002)	Total (n = 1,075)
Army	20.9	12.5	13.8 (0.9)	23.4	11.1	11.7 (1.2)
Navy	12.3	3.7	5.0 (0.5)	15.4	4.9	5.4 (0.7)
Marine Corps	7.5	3.8	4.4 (0.6)	7.3	2.4	2.6 (0.5)
Air Force	13.6	5.0	6.3 (0.5)	25.2	6.2	7.1 (0.9)
Any Military Recruiter	44.2	21.9	25.2 (1.2)	54.5	19.9	21.6 (1.5)

Note: Tabled values are column percentages with standard errors in parentheses.

Source: Questions 510-513, 628, 629.

contact among older males and Air Force recruiter contact among older females, the other differences do not reach conventional levels of statistical significance.

As shown in Table 10.2, the most frequent form of initial contact reported by young males and both young and older females was talking with a recruiter at school (19 percent, 14 percent and 8 percent, respectively). The second most common method of initial contact for the young males was getting a phone call from a recruiter (13 percent). Among the older males, three methods were mentioned about equally as frequently--talking with a recruiter at a recruiting station (15 percent), talking with a recruiter at school (13 percent), and getting a phone call from a recruiter (11 percent).

In general, positive propensity individuals were more likely to have made a phone call or gone to a recruiting station than those who expressed negative propensity. Young males and young females who expressed positive propensity were more likely to report having first contacted a recruiter at school than those expressing negative propensity. The only anomalous finding is that young males expressing negative propensity were more likely to report that receiving a phone call from a recruiter was their first contact than those expressing positive propensity. It is likely, however, that recruiters attempt to contact high quality individuals who, as we have seen previously, are more likely to express negative propensity than individuals of somewhat lesser quality.

## **2. Comparisons of Recruiter Contact: 1985 to 1987**

Figure 10.1 shows positive propensity as a function of recruiter contact for the past three years for young males and young females. In general, it is clear that respondents with recruiter contact are more likely to express positive propensity than their counterparts without recruiter contact. Indeed, for 1987, all of the recruiter contact-no contact comparisons are significant. The range of increments in positive propensity associated with recruiter contact, however, is fairly uneven. Among the young males, contact with an Army recruiter is associated with an increment of only 4 percentage points (35.2 versus 31.5 percent), whereas contact with an Air Force recruiter is associated with an increment of 18 percentage points (48.0 versus 30.5 percent). The differentials among young females tend to be larger. The

Table 10.2 Method of First Contact with Recruiters

Method of Contact	Young Males			Older Males		
	Positive Propensity (n = 1,873)	Negative Propensity (n = 3,762)	Total (n = 5,635)	Positive Propensity (n = 172)	Negative Propensity (n = 931)	Total (n = 1,103)
Got a phone call	10.2	14.3	13.0 (0.5)	14.6	10.4	11.1 (1.0)
Made a phone call	3.4	2.0	2.5 (0.3)	14.2	7.6	8.6 (1.0)
At recruiting station	10.9	5.2	7.1 (0.5)	21.1	13.8	15.0 (1.0)
At job fair	0.3	0.5	0.6 (0.1)	0.0	0.7	0.6 (0.2)
At school	24.9	15.8	18.8 (0.7)	13.1	12.8	12.8 (1.1)
Some other way (or don't know)	7.7	4.0	5.2 (0.4)	6.8	3.6	4.1 (0.7)

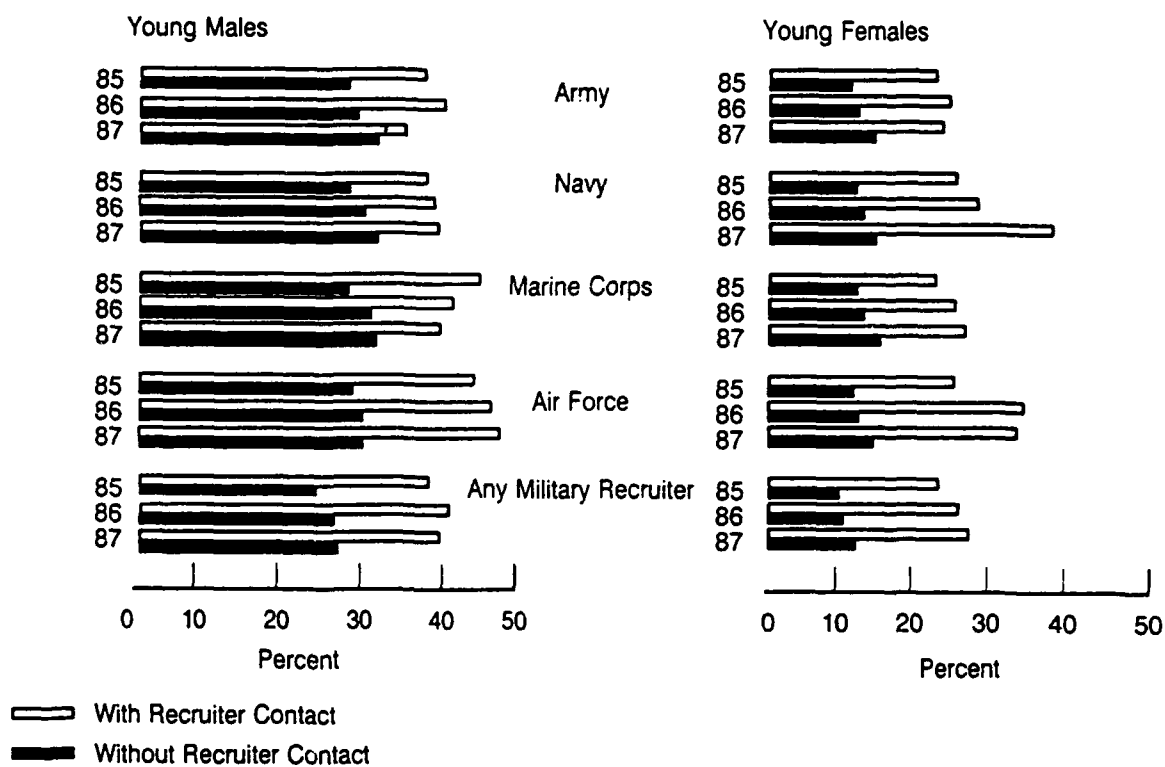
  

Method of Contact	Young Females			Older Females		
	Positive Propensity (n = 475)	Negative Propensity (n = 2,969)	Total (n = 3,444)	Positive Propensity (n = 53)	Negative Propensity (n = 1,022)	Total (n = 1,075)
Got a phone call	4.6	3.8	3.9 (0.5)	7.5	1.9	2.2 (0.4)
Made a phone call	2.4	0.8	1.0 (0.2)	16.8	3.7	4.3 (0.7)
At recruiting station	5.2	2.0	2.5 (0.4)	13.4	5.5	5.9 (0.8)
At job fair	1.0	0.6	0.7 (0.1)	0.0	0.2	0.2 (0.1)
At school	26.1	11.5	13.7 (0.9)	12.3	7.7	7.9 (1.1)
Some other way (or don't know)	5.4	2.9	3.3 (0.5)	9.4	1.6	2.0 (0.5)

Note: Tabled values are column percentages with standard errors in parentheses.

Source: Questions 510-513, 632-641.

**Figure 10.1. Positive Propensity as a Function of Recruiter Contact with Young Males and Young Females, 1985-1987**



NOTE: Values represent percentages of each group showing positive active propensity.

SOURCE: Questions 510-513, 628, 629

smallest percentage point difference (9 points) is associated with contact with an Army recruiter, whereas the largest (23 percentage points) is associated with contact with a Navy recruiter. Generally, the greater differences in expressed positive propensity for the young females and for Services other than the Army may indicate that young females are more likely to initiate contact with a recruiter than are young males and that respondents are more likely to initiate contact with the Navy, Marine Corps and Air Force than they are to initiate contact with the Army.

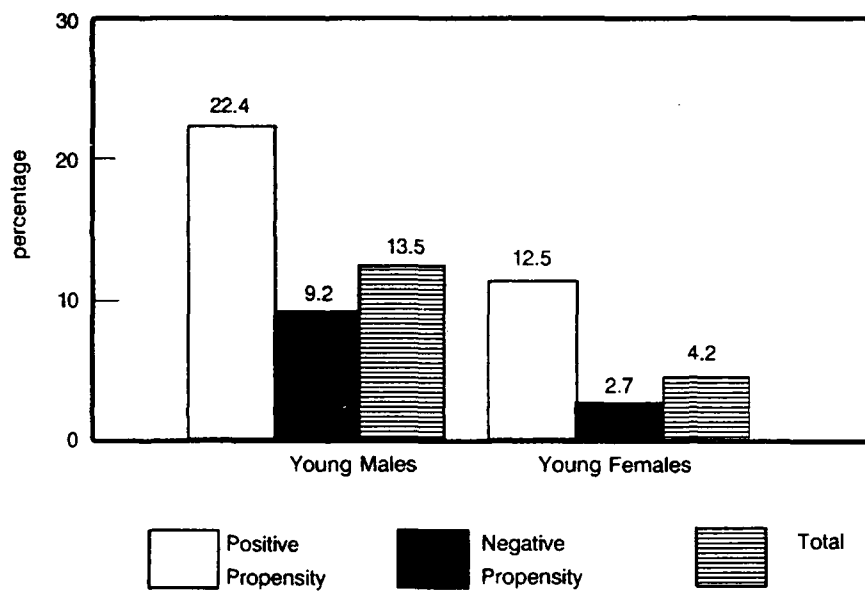
The range of increments in positive propensity associated with recruiter contact in 1985 and 1986 is generally similar to that in 1987 (with the exception of the Army), but the differences between the Services are not as great as in 1987. Among the young males, having had contact with an Army recruiter is associated with an increment of 10 percentage points for both 1985 and 1986, whereas contact with an Air Force recruiter is associated with an increment of 16 percentage points. The differentials among young females did not fluctuate among the services as much as the differentials for young males. For young females, each Service generally differed by only 2 percentage points in 1985 and only the Air Force differed by more than 2 percentage points (6 percentage points) in 1986.

In general, the proportion of young males and young females expressing positive propensity who do not have recruiter contact has increased about 2 percentage points each year. There was not a similar trend for young males and young females who did contact a recruiter. The proportion of young males reporting contact with a Navy or Air Force recruiter and who express positive propensity has increased through the years, whereas the proportion reporting contact with a Marine Corps recruiter and who express positive propensity has decreased. The proportion for the Army rose in 1986 and fell in 1987. For young females, positive propensity for the Army and the Marine Corps remained fairly steady; it rose significantly by 10 percentage points for the Navy in 1987 and the Air Force in 1986.

### 3. Visits to a Recruiting Station

Young respondents were asked whether they had visited a recruiting station to obtain information about the military in the past 12 months. Figure 10.2 shows the relatively small percentages of young males (13 percent) and young females (4 percent) who had done so. In addition, consistent with previously discussed results concerning recruiter contact,

**Figure 10.2. Visited a Recruiting Station Within the Past 12 Months**



NOTE: Estimates are based on interviews with 5,637 young males (1,873 with positive propensity and 3,764 with negative propensity) and 3,444 young females (475 with positive propensity and 2,969 with negative propensity). Question was not asked of older subsamples.

SOURCE: Questions 510-513, 627.

positive propensity respondents in both market groups were much more likely to have visited a recruiting station than comparable respondents with negative propensity.

#### **B. Recruiter Contact and Predicted AFQT**

As seen previously in Table 10.1, about 45 percent of the young males and 25 percent of the young females reported having ever had contact with a recruiter from one of the four active Services. In this section, these data are broken down even further to look at lifetime recruiter contact and contact within the past 12 months as a function of Predicted AFQT. Table 10.3 presents these data for the young males, and Table 10.4 presents parallel data for the young females.

Table 10.3 reveals that classification by predicted AFQT does not provide as much useful information on the extent of recruiter and recruiting station contact as does information about educational status. Among the young males, High School Graduates show the highest levels of lifetime recruiter contact, followed by High School Seniors who, in turn, show higher levels of contact than Younger High School Students. This pattern occurs for contact with any recruiter as well as for contact with recruiters from the individual Services. Among the young females (Table 10.4), the High School Graduates and High School Seniors show similar levels of lifetime contact with recruiters. Only the Category IIIB-V respondents differ when High School Seniors are compared with Younger High School Students; specifically, Category IIIB-V Younger High School Students have lower reported levels of contact than Category IIIB-V Seniors.

Within educational status groups, few differences are seen as a function of Predicted AFQT. Category IIIB-V young male Graduates and Seniors are more likely to report contact than their Category I-IIIA counterpart. This pattern is also seen in young female High School Graduates.

Naturally, the percentages reporting contact with a recruiter in the past 12 months are lower than the percentages reporting lifetime contact.





Table 10.4. Young Females' Recruiter Contacts by Service and Predicted AFQT

Recruiter Contact	Predicted AFQT Group						
	High School Graduates (n=1,441)		High School Seniors (n=729)		Younger High School Students (n=755)		Total (n =3,444)
	Category		Category		Category		
	I-III A	IIIB-V	I-III A	IIIB-V	I-III A	IIIB-V	
<u>Lifetime</u>							
Army	16.4	19.7	9.0	15.4	7.1	8.6	13.8
Navy	5.3	5.9	7.1	7.2	2.9	3.3	5.0
Marine Corps	4.1	6.2	3.4	5.7	2.7	4.0	4.4
Air Force	7.4	8.3	6.2	7.4	5.8	5.9	6.3
Any military recruiter	28.4	34.4	21.6	29.1	16.2	18.5	25.3
<u>Last 12 Months</u>							
Army	6.3	7.7	6.1	11.8	4.6	5.9	6.7
Navy	1.7	1.6	2.4	4.9	2.0	1.9	2.0
Marine Corps	1.2	1.5	2.4	3.6	1.7	2.5	2.2
Air Force	2.1	2.3	3.7	4.2	3.9	3.2	2.6
Any military recruiter	9.6	11.7	12.1	19.4	10.0	10.9	11.3
<u>Visited Recruiting Station in Last 12 Months</u>							
	3.5	7.0	2.3	4.6	4.2	4.1	4.2

Note: Tabled values are cell percentages.

Source: Questions 627, 628, 629, 633, 636, 639, 642.

It is also clear that, among young males, High School Seniors have higher reports of recent contact than either High School Graduates or Younger High School Students. Among young females, Category IIIB-V Seniors also show higher percentages of recent contact than both comparable Graduates and Younger High School Students. Only one difference is evident as a function of Predicted AFQT; male Category IIIB-V Seniors show a higher percentage of contact than those in Category I-IIIA.

These tables also provide data to determine whether the pattern of educational status and Predicted AFQT seen for contact with any military recruiter holds for recruiters from the individual Services. The data for young males presented in Table 10.3 clearly show that lifetime contacts and those within the past 12 months are most likely with Army recruiters (24 percent and 13 percent, respectively). In general, contacts with the other three active Services are very similar between Predicted AFQT groups within educational status (lifetime contacts ranged from 11-13 percent; contacts in the past 12 months ranged from 5-8 percent). The general pattern observed for overall lifetime recruiter contacts was also observed within each Service: High School Graduates had the highest levels of contact followed by High School Seniors, Non-Completers, and Younger High School Students.

Similarly, the pattern of contacts with recruiters from the individual Services in the past 12 months was also similar to the pattern of contact with a recruiter from any Service: High School Seniors had the highest levels, followed by Graduates and Non-completers, with Younger High School Students bringing up the rear. Again, there were no consistent differences within educational status as a function of Predicted AFQT.

Among the young females (Table 10.4), as was the case for the young males, both lifetime contact and contact within the past 12 months are most likely with an Army recruiter (14 percent and 7 percent, respectively). Lifetime contact with recruiters from the other Services ranged from 4-6 percent, and contact within the past 12 months ranged from 2-3 percent. There are only scattered significant differences for contact in either of these time frames between educational groups, but these few differences are consistent with the differences seen in the overall recruiter contact data.

For lifetime contact, Graduates and Seniors look the same, and Category IIIB-V Seniors show higher contact than comparable Younger High School Students. For contact in the past 12 months, Category IIIB-V Seniors show higher contact than either comparable Graduates or Younger High School Students.

Finally, Tables 10.3 and 10.4 also provide the percentages reporting having visited a recruiting station within the past 12 months. Among the young males, similar percentages of High School Graduates and Seniors reported visiting a recruiting station (15-21 percent); only 5-7 percent of Younger High School students reported having done so. Within the two older groups, those in Category IIIB-V had higher levels than those in Category I-IIIA. Similar percentages of young females reported having visited a recruiting station in the past 12 months, regardless of educational status. Only Category IIIB-V High School Graduates were different from all of the other groups (7 percent versus 2-5 percent).

#### C. Differences Between Respondents With and Without Recruiter Contact

Because discussing the military with a recruiter is an active step, it is of interest to determine whether there are differences between individuals who have talked with recruiters and those who have not. To examine this issue, young males and young females were divided into those having contact and those not having contact with a recruiter. These two groups were compared on a number of personally descriptive (e.g., sociodemographic, attitudinal/normative) variables.

##### 1. Differences in Sociodemographic Characteristics

Table 10.5 presents the cross-tabulations of recruiter contact with the sociodemographic variables of age, race/ethnicity, marital status, and employment status. Discussion of these variables in Chapter 3 (Tables 3.6 and 3.7) indicated that all of them are associated with propensity to enlist as well as being in general highly intercorrelated. The strong relationship of propensity with recruiter contact prompted speculation in the 1986 YATS II report that recruiter contact is related to these sociodemographic variables as well. The results presented in the 1986 report generally supported that hypothesis, although total consistency in the responses was not obtained. Similar general support is observed in the 1987 data, especially with regard to the responses of the young males.

Table 10.5. Sociodemographic Characteristics as a Function of Recruiter Contact for Young Males and Young Females

Sociodemographic Characteristics	Young Males		Young Females	
	Recruiter Contact <sup>a</sup> (n = 1,429)	No Contact (n = 4,213)	Recruiter Contact <sup>a</sup> (n = 375)	No Contact (n = 3,073)
<u>Age</u>				
16-17	50.7 (1.7)	52.1 (1.0)	52.2 (4.0)	49.0 (1.4)
18-19	42.2 (1.7)	27.1 (0.9)	36.9 (3.6)	28.7 (1.2)
20-21	7.1 (0.8)	20.7 (0.8)	10.9 (3.7)	22.3 (1.2)
<u>Race/Ethnicity</u>				
White	74.4 (1.5)	77.1 (0.9)	61.9 (4.0)	77.8 (1.1)
Black	14.2 (1.2)	9.8 (0.7)	22.7 (3.3)	9.7 (0.7)
Hispanic	8.9 (0.9)	8.9 (0.5)	13.2 (3.5)	10.2 (0.9)
Other	2.6 (0.5)	4.2 (0.6)	2.2 (0.7)	2.4 (0.3)
<u>Marital Status</u>				
Never married	98.5 (0.4)	96.7 (0.3)	92.8 (3.2)	87.3 (1.0)
Currently married	1.1 (0.4)	2.9 (0.3)	5.2 (3.0)	11.0 (1.0)
Other <sup>b</sup>	0.4 (0.2)	0.5 (0.1)	2.0 (1.3)	1.8 (0.4)
<u>Employment Status</u>				
Student, employed	26.6 (1.5)	29.2 (0.9)	17.8 (3.3)	22.9 (1.2)
Student, not employed	37.5 (1.7)	30.5 (0.9)	33.0 (3.4)	33.2 (1.3)
Non-student, employed	20.0 (1.2)	20.1 (0.8)	28.2 (3.6)	20.6 (1.2)
Non-student, not employed	15.9 (1.2)	20.3 (0.9)	21.0 (3.9)	23.2 (1.2)

Note: Tabled values are column percentages with standard errors in parentheses.

<sup>a</sup>Contact with a recruiter representing any of the four active Services within the previous 12 months.

<sup>b</sup>"Other" Includes widowed, divorced and separated.

Source: Questions 403, 416, 417, 633, 636, 639, 642, 713C, 714, 715.

For both young males and young females, those who have had recruiter contact in the past 12 months are much more likely to be 18-19 years old than those without contact; those without contact are, correspondingly, more likely to be 20 or 21 years old. The two groups are equally likely to be 16 or 17 years of age. These differences are consistent with the recruiting policy of concentrating on contacting high school juniors and seniors. Among both young males and females, those with recruiter contact are more likely to be Black than those without contact. This relationship is especially striking for the females, where the differential is 13 percentage points. Among young females, those without contact are also significantly more likely to be white than those with contact. Whether these race-related differences are a function of recruiter-initiated or self-initiated contact cannot be determined from the data gathered, but the question remains an interesting one, especially given the previously discussed relationship between race and propensity.

Young males who had recruiter contact are significantly more likely to have never been married than those without contact; young females show the same pattern, but it is not statistically significant. Finally, the relationship of employment status to recruiter contact seems to vary with gender. Young males with recruiter contact are more likely to be unemployed students and less likely to be unemployed non-students than those without contact. This relationship, however, may very well be the direct result of the kind of self-selected sample restriction discussed in previous sections. Recruiters, as already mentioned, concentrate their efforts on high school juniors and seniors (who are full-time students and, often, unemployed) who recruiters encourage to wait until graduation to enlist. While that group is thereby inflated, unemployed non-students (non-completers or high school graduates) who are of high quality and have been contacted by, or have themselves contacted, recruiters may have already enlisted and be ineligible for the sample, thus deflating the extent of the recruiter contact in that group. The only employment status differential for the young females is that those with recruiter contact are more likely than those without contact to be employed non-students.

## 2. Differences in Educational Background

Table 10.6 presents the results of the recruiter contact group analyses for variables related to education. Consistent with the age differences discussed above, as well as with the caveat concerning the self-selected nature of the sample for high school graduates, young males with recruiter contact are less likely to have completed 10 or fewer years of schooling than those without contact. The recruiter contact group is also more likely to have completed either 11 or 12 years of education than their no-contact counterparts. In addition, those with recruiter contact are less likely to report having completed some college than those without contact. The female groups do not have a parallel pattern. The only significant difference between groups among the young females is that those with recruiter contact were more likely to have completed at least 10 years of school than those without contact.

Among the young males, those with recruiter contact are more likely to report that they were attending school (as of October 1, 1987) than were those without recruiter contact. Again, this result is very consistent with findings discussed previously. The current educational status of young females with contact does not differ significantly from that of those without contact.

The desire for further education is related to recruiter contact for both young males and young females. Those with contact are more likely to want further schooling than those without such contact. It may be that recruiter contact by these individuals reflects an interest in the educational benefits offered by the Services.

The last variable presented in Table 10.6, mothers' education, is often used as a proxy for socioeconomic status. There are no differences in this variable between those with and without recruiter contact for either of the market groups.

## 3. Differences in Attitudes

The final set of variables examined as a function of recruiter contact, presented in Table 10.7, deals with attitudes and interpersonal influences. Given the strong relationships already discussed between these variables and propensity, it is not surprising that they are also reliably

Table 10.6. Education-Related Variables as a Function of Recruiter Contact for Young Males and Young Females

Education-Related Variables	Young Males		Young Females	
	Recruiter Contact <sup>a</sup> (n = 1,426)	No Contact (n = 4,180)	Recruiter Contact <sup>a</sup> (n = 374)	No Contact (n = 3,053)
<u>Years of Education Completed</u>				
Less than 10	5.5 (0.7)	10.5 (0.7)	2.7 (0.8)	6.6 (0.8)
10	15.9 (1.2)	28.2 (1.0)	25.5 (4.2)	23.5 (1.3)
11	38.9 (1.7)	25.2 (0.9)	31.7 (3.6)	26.4 (1.2)
12	32.4 (1.6)	26.1 (0.9)	29.7 (3.1)	32.3 (1.3)
Some vocational school	0.3 (0.1)	0.8 (0.2)	0.3 (0.3)	0.8 (0.2)
Some college	7.0 (0.9)	9.3 (0.6)	10.2 (2.9)	10.4 (0.9)
<u>Current Educational Plans/Status<sup>b</sup></u>				
Attend school	74.2 (1.5)	68.1 (1.0)	72.0 (4.3)	63.6 (1.4)
Not attend school	25.5 (1.5)	30.4 (0.9)	27.6 (4.3)	36.0 (1.4)
Don't know	0.3 (0.1)	1.5 (0.4)	0.5 (0.3)	0.5 (0.1)
<u>Want Further Schooling</u>				
Yes	93.3 (1.0)	89.3 (0.6)	97.1 (0.9)	91.0 (0.7)
No	6.7 (1.0)	10.7 (0.6)	2.9 (0.9)	9.0 (0.7)
<u>Mother's Years of Education</u>				
Less than 10	5.0 (0.7)	5.9 (0.4)	7.5 (3.0)	6.9 (0.6)
10	3.2 (0.5)	3.0 (0.3)	4.3 (1.2)	3.8 (0.5)
11	5.0 (0.8)	3.6 (0.3)	5.8 (1.2)	5.5 (0.8)
12	46.9 (1.7)	46.6 (1.0)	44.7 (3.9)	43.3 (1.4)
Some college or vocational school	33.2 (1.6)	31.7 (1.0)	32.7 (4.0)	33.1 (1.4)
Don't know	6.7 (1.0)	9.3 (0.6)	5.0 (1.5)	7.4 (0.8)

Note: Tabled values are column percentages with standard errors in parentheses.

<sup>a</sup>Recruiter contact refers to contact with a recruiter representing any of the four active Services within the previous 12 months.

<sup>b</sup>Data were collected during August, September, October and November, 1987. Questions prior to October 1 asked about planned status for October; questions after October 1 asked about actual status.

Source: Questions 404, 407, 410A, 410B, 633, 636, 639, 642, 713B.



Table 10.7. Attitudinal/Normative Variables as a Function of Recruiter Contact for Young Males and Young Females

Attitudinal/Normative Variables	Young Males		Young Females	
	Recruiter Contact <sup>a</sup> (n = 1,422)	No Contact (n = 4,153)	Recruiter Contact <sup>a</sup> (n = 374)	No Contact (n = 3,029)
<u>Favorability of People Who Matter Most<sup>b</sup></u>				
Favorable	51.8 (1.7)	38.3 (1.0)	49.2 (4.1)	27.0 (1.2)
Neither favorable nor unfavorable	20.7 (1.3)	27.0 (0.9)	20.4 (3.6)	31.5 (1.4)
Unfavorable	27.5 (1.7)	34.7 (1.0)	30.4 (3.3)	41.6 (1.4)
<u>Favorability of Self<sup>b</sup></u>				
Favorable	56.8 (1.7)	35.5 (1.0)	47.1 (4.0)	22.1 (1.2)
Neither favorable nor unfavorable	15.4 (1.2)	17.0 (0.7)	16.9 (4.0)	16.7 (1.1)
Unfavorable	27.8 (1.5)	47.6 (1.0)	36.0 (3.9)	61.1 (1.4)
<u>Advice to a Friend<sup>c</sup></u>				
A waste of time	4.8 (0.7)	8.9 (0.6)	7.0 (3.5)	6.5 (0.6)
Up to him/her	46.6 (1.7)	59.2 (1.0)	44.5 (4.0)	63.2 (1.3)
A good idea	48.7 (1.7)	32.0 (1.0)	48.6 (4.1)	30.4 (1.3)
<u>Friend/Relative Enlisted in Last 6 Months</u>				
Yes	51.3 (1.7)	34.6 (1.0)	45.4 (3.9)	37.5 (1.3)
No	48.7 (1.7)	65.4 (1.0)	54.6 (3.9)	62.5 (1.3)

Note: Tabled values are column percentages with standard errors in parentheses.

<sup>a</sup>Contact with a recruiter representing any of the four active Services within the previous 12 months.

<sup>b</sup>Refers to favorability toward serving in the military. "Favorable" includes those responding either "somewhat" or "very" favorable. "Unfavorable" includes those responding either "somewhat" or "very" unfavorable.

<sup>c</sup>Refers to advice about seeing a military recruiter.

Source: Questions 633, 636, 639, 642, 682-683, 690-692.

related to recruiter contact. More specifically, among both young males and young females, those who have had recruiter contact in the past 12 months are more likely than those who have not had contact within this period to report that:

- the people who matter most to them are favorable toward their serving in the active military;
- they themselves are very or somewhat favorable about serving in the active military;
- they would tell a good friend who asked for advice either that seeing a military recruiter is a good idea (young males only) or that it is up to him or her; and
- a good friend or relative enlisted in the last 6 months (young males only).

Where the two recruiter contact groups differ significantly from each other, the actual percentage point differences are quite impressive. The smallest differential is 13 points for advice to a friend--up to him or her (for young males; 19 percentage points for young females). The largest is 25 percentage points for favorability of own attitude (for young females; 21 percentage points for young males).

## 11. PREDICTING ACTIVE PROPENSITY FOR YOUNG MALES AND YOUNG FEMALES

Throughout this report, we have examined the relationships of a large number of variables (i.e., respondent characteristics and responses) with propensity. These analyses provide useful and important information but are limited because they consider the relationship of only one or two variables at a time to propensity. Since many of the variables examined are interrelated (e.g., age, years of education, marital status), assessing the effects on propensity of each variable separately does not allow us to determine the independent contribution of each, apart from the contribution of the other, possibly confounding variables. Regression analysis, which examines the effects on propensity of a number of variables simultaneously and controls for confounding due to intercorrelations among variables, provides a more meaningful and precise view of the data.

This chapter presents results of multiple regression analyses to provide a better understanding of the groups of variables that best predict propensity. Regression models are developed separately for young males and young females. We begin with a sociodemographic model and then successively add psychological/behavioral variables and, finally, interactions of age and predicted AFQT with selected sociodemographic and psychological/behavioral variables.

### A. Specification of Variables and Analytical Approach

The variables for the regression analyses were broadly classified into two broad categories: sociodemographic and psychological/behavioral variables. The variables included in the two categories are listed in Tables 11.1 and 11.2. The criterion, or the predicted variable, is Composite Active Propensity.

In multiple regression analysis, predictor or independent variables are examined to determine how well they can jointly account for or explain the variation that occurs in the criterion or dependent variable of interest.

Table 11.1. Sociodemographic Variable Definitions

Independent Variables	Variable Definition*
Age	Variable of respondent's age in single years (16-21)
Race/Ethnicity	Race/ethnic background of respondent; categorical variable* with the following categories: Black; Hispanic; other nonwhite; white
Educational Status	Highest educational level achieved by respondent; categorical variable with the following categories: 10 years or less; 11 years; more than 12 years; 12 years
Father's Education	Highest educational level achieved by respondent's mother. Categorical variable with the following categories: 10 years or less; 11 years; more than 12 years; 12 years
Marital Status	Categorical variable with the following categories: Married; other than married.
Student Status	Categorical variable with the following categories: Non-student; Part-time student; Full-time student
Employment Status	Categorical variable with the following categories: Unemployed and looking for a job; Employed full time; Employed part time; Unemployed and not looking for a job
Predicted AFQT Category	Continuous variable representing the predicted probability that respondents will score in Categories I-III A on the Armed Forces Qualification Test ((AFQT).
County Total Labor Force	Continuous variable representing average September 1986 total labor force in respondent's county of residence

\*Categorical variables are binary variables (defined as equal to 1 if they have the property or 0 if they do not) where each of the categories (except one) is entered directly into the analysis. Results for each category are interpreted as relative to the omitted category (e.g., Black relative to white, Hispanic relative to white). Other variables enter analysis directly and are interpreted as though they were continuous (e.g., age, predicted AFQT).

Table 11.2. Psychological/Behavioral Variable Definitions

Independent Variables	Variable Definition
Difficulty Finding Full-Time Job	Variable representing perceived difficulty of finding a full-time job in one's community (1=almost impossible to 4=not difficult at all)
Accuracy of Slogan Sponsor Attribution	Composite measure representing the number of attributions of service slogans made to the correct sponsor (0-7)
Exposure to Different Media	Composite measure representing the number of media (of print, broadcast and mailed literature) to which respondent recalled exposure (0-3)
Knowledge of Educational Benefits	Whether any Service has a program that helps pay for college or vocational training. Categorical variable with the following categories: No, Yes
Previous Consideration of Military Service	Variable representing previous thought about joining the military (1=never thought about it to 3=gave it serious consideration)
Friend/Relative Enlisted	In the last six months had friend/relative who enlisted in one of the military services. Categorical variable with the following categories: Yes, No
Own Feelings	Variable representing favorability of one's own feelings about serving in the active military (0=very unfavorable to 4=very favorable)
Others' Feelings	Variable representing perceived favorability of others about respondent serving in the active military (0=very unfavorable to 4=very favorable)
Advice to Others	Variable representing the favorability toward a friend's seeing a military recruiter (1=a waste of time to 3=a good idea)
Called/Mailed for Information	Composite measure representing whether the respondent called a toll-free number and/or mailed a postcard or coupon for information about the military (0-2)
Discussed Serving with Someone	Within the last year or so discussed with someone the possibility of serving in the military. Categorical variable with the following categories: No, Yes
Actions Taken Toward Enlistment	Composite measure representing the number of actions the respondent took of the following: visited a recruiting station in the last 12 months; ever talked with a military recruiter; and ever took the ASVAB (0-3)

The size of the estimated regression parameters associated with each variable indicates the importance of that variable in predicting the criterion measure. In this case, regression analysis is used to examine sociodemographic variables and other characteristics that are most important in explaining the positive propensity of young males and young females. The strength of multiple regression analysis is that it is possible to determine the unique effect of any predictor variable on propensity after adjusting for the effects of other variables.

Three regression analyses were performed for both the young male and the young female market groups. The first analysis (the sociodemographic model) examined the main effects (ignoring any interactions) of sociodemographic variables on predicted propensity. The second analysis (the combined model) examined the main effects (again ignoring interactions) of the variables included in the first analyses plus the psychological/behavioral variables on predicted propensity. The third analysis (the overall model) added interactions to the variables examined in the combined model. Thus, each analysis became more complex, first by adding additional variables and then including interactions among key variables. Following these initial analyses, nonsignificant variables were eliminated and the final models were reestimated. Reported results are from the reestimated models. Further discussion of the rationale for this analytical approach appears in Appendix D.

## **B. Overview of Findings**

The combined regression model which included both the sociodemographic and psychological/behavioral (main effects) variables was significantly more effective in predicting propensity than the limited sociodemographic model. Further, the overall model was significantly more effective than the combined model for both males and females. For the young males, the sociodemographic model accounted for 16 percent of the variation in propensity. Adding the psychological and behavioral variables in the overall model increased the explained variation to 39 percent, and adding interaction terms in the overall model increased the explained variation to 42 percent. The percentage of variance explained for the young females was less than for the young males, but remained predictive of propensity. For the young females, the sociodemographic model explained 12 percent of the

variation in propensity, the combined model increased the explained variation to 33 percent, and the overall model increased the explained variation to 38 percent.

### C. Explaining Propensity with the Sociodemographic Model

Table 11.3 summarizes of the results of the regression analyses for predicting propensity on the basis of sociodemographic variables. These findings are discussed below.

#### 1. Young Males

Of the seven sociodemographic variables, four (educational status, marital status, student status, and father's education) had statistically nonsignificant regression parameters. The model was reestimated using only the highly significant variables--age, predicted AFQT, race/ethnicity and employment status. The  $R^2$  (the percentage of variance explained) for this reduced model was .16 which was essentially as large as the  $R^2$  for the full model. However, since the sample sizes differed between the two models because of more missing data in the full model, the model  $R^2$ 's are not strictly comparable.

Predicted AFQT (an indicator of quality) was clearly the most important predictor of propensity in the sociodemographic model. The estimated regression parameter for quality was  $-.58$  indicating a strong negative relationship between quality and propensity after adjusting for the remaining three variables in the model. As quality increases, propensity decreases. More specifically, predicted AFQT (quality) was on a scale from 0 to 1 indicating that a half-point change, say from .25 to .75, results in a .29 decrease on the 0 to 1 propensity scale.

A strong negative relationship between age and propensity was also found. The regression parameter of  $-.054$  associated with age indicates a decrease of .054 in propensity for each yearly increment in age. The regression parameters associated with ethnicity indicated that the propensity for other nonwhites was .099 higher than for whites. Blacks, whites, and Hispanics had essentially the same level of propensity. With respect to employment status, those unemployed and looking for work had a propensity .12 higher than those unemployed and not looking. Overall these four demographic variables were fairly good predictors of propensity, with age and predicted AFQT category being the most important.

Table 11.3. Parameter Estimates of Significantly Contributing Variables for the Sociodemographic Model of Positive Composite Active Propensity

Independent Variables/Categories	Young Males	Young Females
Age (Years)	-.054***	-.018***
Race/Ethnicity		
Black vs. white	-.024 <sup>a</sup>	.071**
Hispanic vs. white	.034	.009
Other non-white vs. white	.099	-.047
Student Status		
Nonstudent vs. full-time	b	.069***
Part-time vs. full-time	b	.047*
Marital Status		
Married vs. Single	b	.045*
Employment Status		b
Unemployed-Looking vs. Unemployed-Not Looking	.082***	b
Employed F-T vs. Unemployed-Not Looking	.038	b
Employed P-T vs. Unemployed-Not Looking	.082***	b
Predicted AFQT Category	-.582***	-.352***
R <sup>2</sup>	.16	.12

Note: Tabled values are regression parameters (beta values). Analyses used weighted data. The criterion (dependent measure) was Positive Composite Active Propensity (yes, no). Values of the regression parameters indicate the change in positive propensity that is produced by each independent variable after that variable has been adjusted for all the other variables appearing in the model.

<sup>a</sup>The overall regression parameters for race/ethnicity are statistically significant even though none of the individual contrasts is significant.

<sup>b</sup>Variable with no statistically significant contrasts.

\* $p < .05$

\*\* $p < .01$

\*\*\* $p < .001$



## 2. Young Females

Results of the sociodemographic analysis for Young Females showed that regression parameters associated with five sociodemographic variables were statistically significant: age, race/ethnicity, student status, marital status, and predicted AFQT category. Three of the four predictors (age, race/ethnicity, predicted AFQT) were the same as those found in the corresponding male model. Employment status, while significant for males, was not significant for females. On the other hand, student status, while not significant for males, was significant for females. Full-time students had the highest adjusted propensity and nonstudents the lowest with part-time students falling in between. Despite significant results, the sociodemographic model was less predictive of propensity for females than for males. The  $R^2$ s were .116 and .162, respectively.

As with the young males, Predicted AFQT was the strongest predictor of propensity for females. However, the estimated regression parameter associated with AFQT for females was considerably smaller than the corresponding parameter estimate for males,  $-.35$  versus  $-.58$ . The same was true for age. The estimated regression parameter for females was  $-.018$  compared to  $-.054$  for males. The estimated parameter for race/ethnicity indicated that Blacks had the highest propensity (after being adjusted for other variables in the model) and other nonwhites the lowest. This contrasted sharply with the male findings where other nonwhites had the highest adjusted propensity and Blacks the lowest.

The most important finding is that AFQT has a considerably smaller negative effect on female propensity than on male propensity. The small decrease in propensity with increasing age for females as contrasted to a much larger decrease for males is also important. These two findings suggest less differentiation in propensity across AFQT and age groups for females than for males.

### D. Explaining Propensity with the Combined Model

Ten psychological/behavioral variables were added to the sociodemographic model to form the combined model for the second set of regression analyses. Table 11.4 summarizes the results of the regression analyses for young males and young females.

Table 11.4. Parameter Estimates of Significantly Contributing Variables for the Combined Regression Model of Positive Composite Active Propensity

Independent Variables/Categories	Young Males	Young Females
Age (Years)	-.030***	a
Race/Ethnicity		
Black vs. white		a
Hispanic vs. white		a
Other nonwhite vs. white	.102***	a
Educational Status		
10 years or less vs. 12 years	a	.054**
11 years vs. 12 years	a	.029
More than 12 years vs. 12 years	a	-.008
Student Status		
Nonstudent vs. full-time	a	-.044**
Part-time vs. full-time	a	-.041
Employment Status		
Unemployed-Looking vs. Unemployed-Not looking		a
Employed F-T vs. Unemployed-Not looking	-.072***	a
Employed P-T vs. Unemployed-Not looking	.008	a
Predicted AFQT Category	-.412***	-.228***
Difficulty Finding a Full time Job	a	-.016***
Previous Consideration of Military Service	.078***	.068***
Accuracy of Slogan Sponsor Attribution	a	-.017***
Own Feelings	.118***	.081***
Discussed Serving with Someone (Yes vs. No)	.087***	.081***
Called/mailed for Information	.074***	.139***
R <sup>2</sup>	.39	.33

Note: Tabled values are regression parameters (beta values). Analyses used weighted data. The criterion (dependent measure) was Positive Composite Active Propensity (yes, no). Values of the regression parameters indicate the change in positive propensity that is produced by each independent variable after that variable has been adjusted for all the other variables appearing in the model.

aVariable with no statistically significant contrasts.

\*p<.05

\*\*p<.01

\*\*\*p<.001

### 1. Young Males

The results of the analysis for the combined model (i.e., estimating the sociodemographic model plus the 10 psychological/behavioral variables and then reestimating the model using only the significant variables) showed four significant sociodemographic factors (age, race/ethnicity, employment status, and predicted AFQT category) and four significant psychological/behavioral variables (previous consideration of military, favorable attitude (own feelings) about serving, discussing service with someone, and phoning or mailing for information about military). The four demographic and four psychological/behavioral variables together yielded an  $R^2$  of .39 in contrast to an  $R^2$  of .16 for the sociodemographic model. The incremental  $R^2$  for the psychological variables was also larger (.23) than the  $R^2$  for the sociodemographic model (.16). The most important predictor in the combined model was "own-feelings" which indicate attitude toward serving. This variable--measured on a five-point scale--indicates an increase of .118 in propensity for a one-point increase on the attitude scale. The estimated parameters for the remaining three psychological/behavioral variables were smaller, but still significant, ranging from .074 for "phone-mail" to .087 for "discussed service."

All of the demographic variables were still highly significant, but the estimated parameters, especially for age and Predicted AFQT, were somewhat smaller than in the previous sociodemographic only model. The relatively small decrease in parameter sizes for the sociodemographic variables when considered jointly with the psychological/behavioral variables indicates that the latter variables mediate the effects of the sociodemographic variables only to a limited extent. That is, the sociodemographic variables still have strong direct effects on propensity after adjusting for the four highly predictive psychological/behavioral variables. Overall, the two most important predictors of propensity were predicted AFQT and attitudes.

### 2. Young Females

The reestimated model for young females in the combined model showed six psychological variables with significant regression parameters. When added to the six sociodemographic variables they increased the  $R^2$  from .12 to .33. The incremental  $R^2$  of the psychological/behavioral variables was .21, which was about the same as the corresponding .23 for males.

Overall, the model for males was a better predictor of propensity ( $R^2 = .39$ ) than the model for females ( $R^2 = .33$ ). However, there were two more significant psychological/behavioral variables in the female model than in the male model. Four of the six variables were the same as the four psychological/behavioral variables in the male model. Three of these four estimated parameters in the female model were somewhat smaller as would be expected on the basis of the smaller  $R^2$  for the female model. The estimated parameter for phone or mail for information was larger for females than for males. The other two psychological/behavioral variables in the model for females were "difficulty in finding a full-time job" and "accuracy of slogan sponsor" attribution. The two estimated parameters were  $-.016$  and  $-.018$ , respectively. We would expect the first parameter estimate to be negative, but the negative effect of slogan attribution on propensity is somewhat puzzling. However, both of these parameters, although highly significant, are quite small, indicating a decrease in propensity of less than  $.02$  for an increase in one scale unit.

In contrast to the male model, the estimated regression parameters associated with age and race in the combined model became nonsignificant with inclusion of the six psychological/behavioral variables. The effects of marital status also became nonsignificant. Thus, the effects of age, race, and marital status on propensity are mediated by the psychological/behavioral variables for females. They no longer have direct effects on propensity. The effect of predicted AFQT on propensity was somewhat mediated by the psychological/behavioral variables shown by the parameter decrease from  $-.35$  in the sociodemographic model to  $-.23$  in the present model. Similar to the male model, the two most important predictors of propensity were predicted AFQT and own attitude toward serving in the military. However, the estimated parameters associated with both of these variables were somewhat smaller for females than for males. This is consistent with the smaller  $R^2$  associated with the female model.

#### E. Explaining Propensity with the Overall Interactive Model

The combined model for both males and females was enhanced by adding key interaction variables. An interaction variable is simply the cross-product of the two variables that are hypothesized to interact. Since age, predicted AFQT, and attitude toward serving were key independent variables

in the combined model for both males and females, interactions between these three variables were included. The regression parameter associated with the cross-product is the interaction parameter whose size and significance are to be estimated. Results of the analyses showed that the strongest interactions for both males and females were between age and attitude toward serving and between predicted AFQT and attitude toward serving.

### 1. The Age and Attitudes Interaction

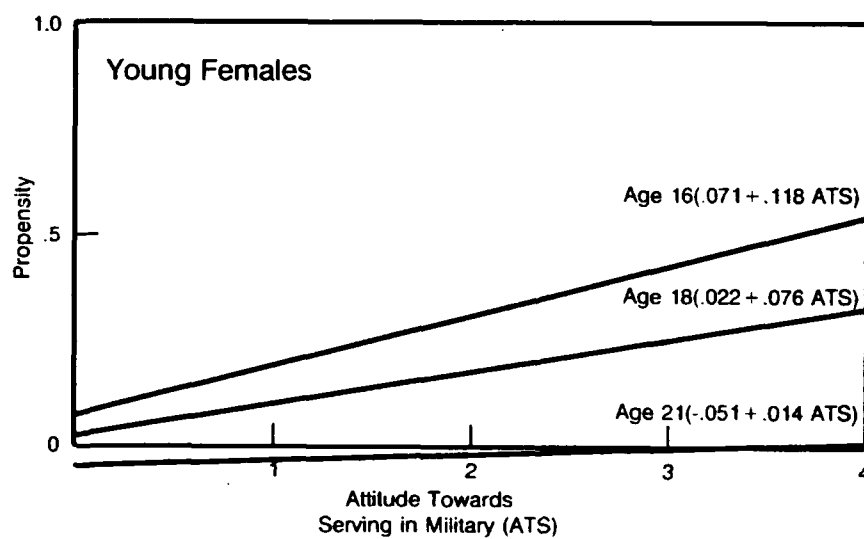
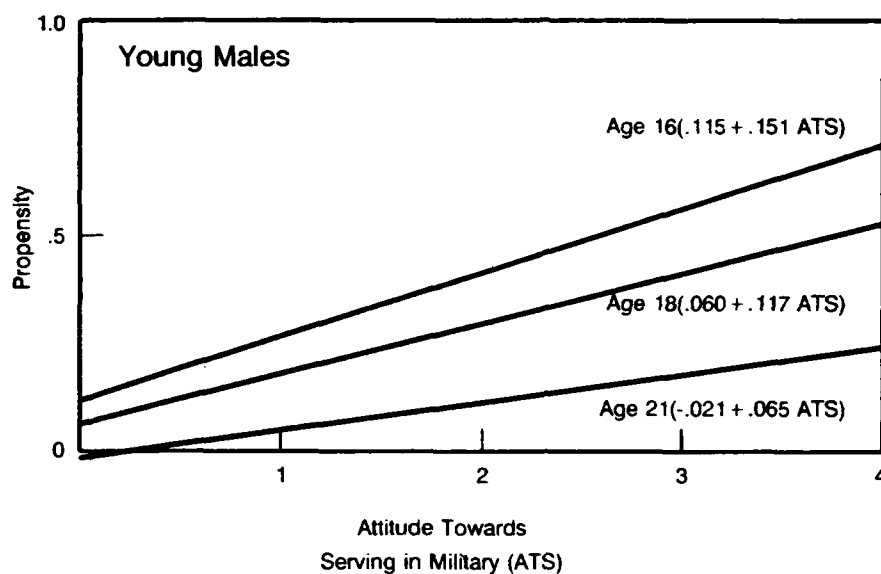
Attitude toward serving was the single most important predictor in the overall model. The interaction parameter associated with age by Attitude Toward Serving indicates that the relationship between attitude toward serving and propensity decreases as age increases. That is, attitude toward serving is more predictive of propensity for younger than for older respondents. This finding was found for both males and females.

The interaction results for males and females are summarized in Figure 11.1. In the figure, three regression lines are shown representing ages 16, 18, and 21. The regression equations associated with each line are also presented. The intercepts (i.e., the point at which the regression line crosses the y-axis) of the male regression lines are higher than the corresponding female regression lines indicating a higher overall propensity for males. The slopes of the lines are also somewhat steeper for males than for females, indicating a stronger relationship between attitudes toward serving and propensity for males. However, in both cases the regression lines diverge as attitudes toward serving increases, indicating a stronger relationship between attitude toward serving and propensity for younger than for older respondents. Positive attitudes do not translate as readily into positive propensity for older respondents.

### 2. Predicted AFQT and Attitude Interaction

The interaction parameter associated with predicted AFQT and attitude toward serving indicates that, for both males and females, the relationship between attitude toward serving and propensity decreases as predicted AFQT increases. That is, attitude toward serving is more predictive of propensity for those respondents with low predicted AFQTs than for

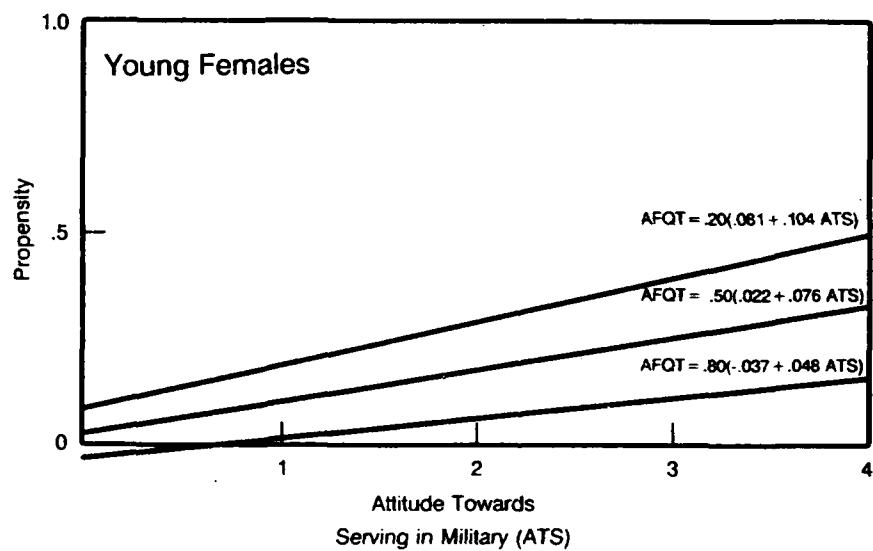
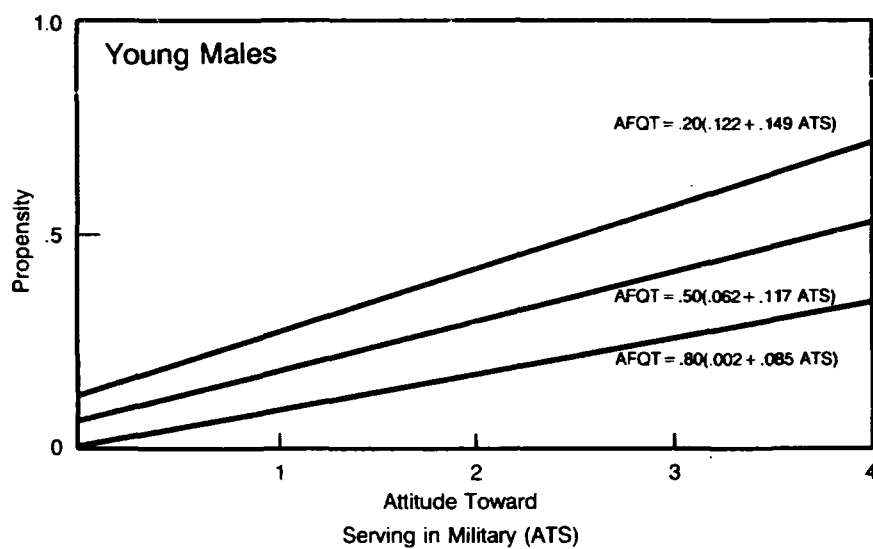
**Figure 11.1. Young Males' and Young Females' Attitude Toward Serving in the Military and Propensity for Ages 16, 18, and 21**



those respondents with high predicted AFQTs. The results for males and females are presented in Figure 11.2. In the figure, three regression lines are shown representing predicted AFQTs of .20, .50, and .80. The intercepts of the male regression lines are higher than the female regression lines, indicating the higher overall propensity for males. Also, the slopes of the lines for males are steeper than the corresponding slopes for females, indicating a stronger relationship between attitude toward serving and propensity for males than for females. However, like age, for both males and females, the regression lines diverge as attitude toward serving increases.

This result reflects the fact that the relationship between attitude towards serving and propensity increases as predicted AFQT decreases. Those with higher predicted AFQTs have low propensity to begin with, and even if they have a positive attitude toward serving, they are less likely to convert this positive attitude into a positive propensity than are those with positive attitudes and low predicted AFQT. Respondents with high AFQTs have more educational and work opportunities in the civilian sector and thus a positive attitude toward military service is less likely to translate into a positive propensity.

**Figure 11.2. Young Males' and Young Females' Attitude Toward Serving in the Military and Propensity for Predicted AFQT Levels of .20, .50, and .80**





## 12. SUMMARY AND HIGHLIGHTS

Maintaining the required manpower strength for the military remains a constant challenge to the Services, especially in times of declining manpower pools of potential recruits and continuing competition from the civilian sector. Effective recruiting for the military requires timely information regarding the characteristics and attitudes of young people, as well as their intentions to serve in the military. This chapter presents a summary and highlights of the results of the 1987 Youth Attitude Tracking Study (YATS) II, a 30-minute, computer-assisted telephone interview administered to a nationally representative sample of 16- to 24-year-old males and females. Four recruit market groups were identified and sampled: 5,642 young males (aged 16-21); 1,103 older males (aged 22-24); 3,448 young females (aged 16-21); and, 1,078 older females (aged 22-24). For a number of the issues investigated, the 16-21 year olds were further segmented by achieved educational status and Predicted AFQT score, and their responses were examined as a function of this segmentation scheme.

### A. Current Enlistment Propensity (Chapter 3)

The major purpose of the Youth Attitude Tracking Study is to assess the self-reported likelihood that young people will enlist in the active military or Reserve Components. In the YATS II series of reports, this likelihood is referred to as "propensity" to join.

The 1987 Composite Active Propensity to join any of the four active Services is, as in the past, highest among young males (32 percent). The other three market groups show Composite Active Propensity that is less than half the young males' level: older males, 16 percent; young females, 15 percent; older females, 7 percent. Each of the individual active Services shows this same pattern; young males express the highest levels of positive propensity (between 11 and 18 percent), followed by older males (between 6 and 9 percent), young females (between 4 and 9 percent), and older females (between 2 and 3 percent). In general, the Air Force and the Army have the highest, and very similar, propensity levels.

The pattern of propensity to serve in the Reserve Components is parallel to although, overall, lower than propensity to serve in the active military. Composite Reserve Propensity is highest among young males (21 percent), followed by older males (14 percent), young females (9 percent), and older females (4 percent). Both young males and young females show higher propensity to join the Reserves than the National Guard (17 percent versus 13 percent among the young males; 7 percent versus 5 percent among the young females). Older males (9-10 percent) and older females (2-3 percent) do not demonstrate this preference.

"Unaided mentions" show lower percentages of respondents indicating interest in joining the military--any branch or the active military--than do the propensity measures. Young males again show the highest interest levels (6-9 percent), followed by young females and older males (1-2 percent among each group) and older females (less than 1 percent).

Both active and Reserve propensity show two basic patterns for the younger groups. First, positive propensity declines for the individual Services and Reserve Components with each increase in category of educational achievement (Younger High School Student to High School Senior to High School Graduate). Second, within each educational status group, positive propensity is consistently higher among respondents in AFQT Category IIIB-V than those in Category I-IIIA. The active Service propensity differences among young males range from 3 to 21 percentage points and for young females from 2 to 12 percentage points. The variables determining AFQT category, however, include a measure of interest in serving in the military that is correlated with propensity. This partially explains the size of the differences between Predicted AFQT groups.

Positive Composite Active Propensity was found to be related to being: young (especially among males); Black and nonwhite; unmarried; attending school (among the younger groups); of lower educational status (especially the completion of 11 grades or fewer); and unemployed but looking for a job (among the younger groups, and especially young males). The close relationship of virtually all these variables with age, however, precludes drawing firm conclusions about the primary source of the effect.

Positive Composite Reserve Propensity was found, in general, to be related to being: Black and, secondarily, Hispanic; unmarried (except among older males); of lower educational status (especially the completion

of 11 grades or fewer); and unemployed but looking for a job. The same caveat discussed above with respect to age, however, applies to a lesser extent here.

#### **B. Trends in Enlistment Propensity (Chapter 4)**

A central feature of the YATS II is the ability to track annually the changing interest and attitudes of youth toward the military. Thus, programs and policies can respond quickly to appeal most effectively to future recruits.

Data for young males show highly similar patterns for Composite Active Propensity from 1976 through 1979, with an initial increase followed by a general downward trend. Composite Active Propensity increased from 1979 to 1982, leveled off in 1983, and significantly declined in 1984. In 1985, Composite Active Propensity remained at the 1984 level, and in 1986 showed a slight but nonsignificant increase. There was another small nonsignificant increase in 1987. Young female Composite Active Propensity rose between 1980 and 1981, dropped in 1982 and 1983, rose again in 1984, remained essentially unchanged in 1985, and rose in 1986 and in 1987.

Overall, the 1987 YATS II results reveal very few changes from the previous year's data. Most of the changes in active propensity and unaided mentions between 1986 and 1987 are positive, but only one change is statistically significant. This is the 2 percentage point increase in young males' propensity toward joining the Air Force (from 16 to 18 percent). There were no consistent or significant changes in Reserve propensity between 1986 and 1987.

The small increments between 1985 and 1987 in Composite Active Propensity, however, did produce a 1987 propensity level for young males that is significantly higher than the levels in both 1984 and 1985. In addition, among the young females, the 1987 Composite Active Propensity level is significantly higher than that of 1985.

The previously strong linear relationship between unemployment rates and positive Composite Active Propensity for the young males which was observed between 1980 and 1985 has weakened in the past two years. This is due to an increase in positive propensity in 1986 and 1987, concurrent with a decrease in the unemployment rate. Strong noneconomic factors, then, influence the rise and fall of propensity. These factors must be

identified and examined. As has been the case in the past, young females' propensity levels remain unrelated to unemployment rates.

### C. Intentions, Alternatives and Active Propensity (Chapter 5)

Youths measure the attractiveness of military service against the attractiveness of the many other available activities or occupational opportunities. Individuals may choose from attending school, managing a home, and engaging in various types of part-time or full-time work. Therefore, YATS II examines respondents' overall likelihood of engaging in specified alternative activities in the next year and in the next few years. In addition, the specificity of respondents' propensity toward different components of military service is investigated.

Attending college is the most frequently mentioned future activity, being reported by between one-half and four-fifths of all respondents. The second most common expectation for males is attending vocational or technical school; for females, it is working in a business office. All of the alternate future plans are mentioned more frequently than was service in the military.

The most likely plans for October of 1988 (or following high school graduation, for younger individuals) include further schooling or full-time work for most individuals. Just under half of both groups of younger respondents expect to be going to school full time, while one-third or less of these two groups expect to be working full time. Three-fourths of the older males and almost half of the older females expect to be working full time. Almost one-fifth of the older females expect to be full-time homemakers. Only 7 percent of young males, 2 percent of young females, and 1 percent of both older groups report service in the military as their most likely plan for this time period. Not surprisingly, positive propensity respondents in all market groups are more likely to expect to be serving in the military than their negative propensity counterparts.

Male high school students are more likely than Graduates to expect to be attending school full time in the next year (or, where relevant, following high school graduation), whereas Graduates are more likely than students to expect to be working full time. Category I-IIIA youths are more likely than their Category IIIB-V counterparts to expect to be in school and less likely to expect to be working. Category IIIB-V youths are more

likely to expect to be serving in the military. These differences occur within each educational status group and suggest that full-time schooling attracts high quality potential military recruits more than the full-time labor market. The patterns displayed by the young females are consistent with the conclusions drawn from the young males' data.

Propensity was also examined as a function of expected plans. Young males' propensity levels increased as a function both of decreased educational status and being in Category I-IIIA rather than Category IIIB-V. In addition, the magnitude of the differences in positive active propensity associated with Predicted AFQT category decreased as educational status increased, with Younger High School Students showing the largest discrepancies. Propensity was essentially the same within Predicted AFQT category regardless of whether individuals were expecting to go to school or work full time.

Among young females, Seniors and Graduates show similar expressed propensity while more Younger High School Students show positive propensity, regardless of future plans. Fewer females in Category I-IIIA expressed positive propensity, a pattern that was also noted for males.

For young males and especially for young females, positive propensity is also associated with estimations of greater difficulty in finding a full-time job in one's community.

Respondents with positive propensity, regardless of their overall intentions, are most likely to say that it would be more than two years before they joined the military. About half of the queried respondents gave this estimate. The large number of 16-17 year olds who anticipate being in school for another one to two years should be considered in reviewing these estimates for the younger groups.

Overall, those who expect more education expressed higher propensity than those who do not expect more education. This finding among high school graduates suggests that an emphasis on educational benefits may be a useful recruiting tool.

About half of the respondents who expressed positive propensity toward serving in any component of the military were fairly nonspecific, expressing positive propensity toward both the active and Reserve Components. The other half of the respondents, then, expressed positive propensity toward either the active military or the Reserve. Young males and females were

four times more likely to be positive about active military service than about service in the Reserves.

At least two-fifths of all males and females who expressed positive propensity toward the Guard or the Reserves did not prefer one over the other. Conversely, nearly two-thirds of the groups showed positive propensity toward either the Guard or the Reserves. Although older males were evenly divided in their preferences for one or the other of the two components, young males and young females were about twice as likely to express positive propensity toward the Reserves as toward the Guard.

#### D. Interpersonal Influences, Attitudes and Active Propensity (Chapter 6)

Attitudes (learned tendencies to evaluate a person, thing, event or situation in a certain way) and perceived norms (shared standards of expected behavior by group members) have consistently been shown to be important predictors of military service. Therefore, variables directly and indirectly indicative of attitudes and norms continue to be examined as part of YATS II.

Males are more likely to have given serious or some consideration to joining the military than are females (about three-quarters of the males versus approximately half of the females). In all groups, a higher percentage of individuals with positive propensity had given prior serious consideration to serving in the military.

Expressions of favorable attitudes toward military service were most common among young males (41 percent), followed by older males (31 percent), young females (25 percent) and older females (21 percent). This pattern is repeated in the results of a question concerning perceived norms. For both attitudes and perceived norms, respondents with positive propensity were between two and five times more likely to give favorable reports than were respondents with negative propensity. Between 32 and 36 percent of all the groups reported that they would be likely to tell a friend that seeing a recruiter is a good idea; this pattern contrasts with that seen for the attitude and norm questions. Nonetheless, those with positive propensity were twice as likely to say this as were their negative propensity counterparts.

Looking at attitudes and norms among the young respondent groups as a function of Predicted AFQT reveals that increasing educational status is associated with a decreased probability of showing favorable attitudes, perceived norms or intentions regarding advice to a friend. Membership in Category I-IIIA versus Category IIIB-V also entails a decreased probability of expressing positive propensity toward military service. Examining propensity as a function of Predicted AFQT and favorability of attitudes and interpersonal influences lends further support to the robustness of these patterns. In addition, the pattern of propensity results indicates that the measure that is most strongly associated with propensity is one's attitude about serving in the military.

The recent enlistment of a close friend or relative is reported by between one-fifth and one-quarter of the market groups. Only among young males is positive propensity associated with increased probability of reporting the occurrence of this event.

#### E. Enlistment Incentives and Propensity (Chapter 7)

All of the career or employment alternatives open to individuals have both positive and negative aspects. One of the major goals of military advertising is to increase knowledge about the advantages and benefits of military service and to create a favorable attitude toward the military.

Effects of knowledge of starting pay and the existence of educational benefits are the major topics investigated with regard to enlistment in the active Services. General intentions to join the military after being told the monthly starting pay are either similar to (males) or significantly more positive (females) than general intention levels reported before being told the actual starting monthly pay for an enlisted person.

Passage of the New GI Bill in July of 1985 makes the assessment of knowledge about educational benefits provided by the military a very interesting issue. Between 48 and 64 percent of respondents knew there are programs designed to help with college or vocational training. Young males showed high awareness levels but, unlike last year, young respondents with positive propensity did not have higher levels of awareness than their negative propensity counterparts. As observed in previous years, the Army was consistently mentioned most often as the Service providing this kind of program.

Approximately two-thirds of all respondents correctly believe that educational benefits can be used both during military service and after leaving the military. The other respondents are consistently more likely to believe that educational benefits can be used only while in the military (18-25 percent) rather than only after leaving the military (10-13 percent).

Composite Reserve Propensity was also examined in light of awareness of several factors related to enlistment in the National Guard or Reserves. Results show that the older market groups were better than the younger groups in estimating the correct number of required training days per month (2) and active duty training days per year (14). Overall, the older males and females averaged 43 percent and 34 percent accurate responses on these two items, respectively; the younger males and females averaged 29 percent and 24 percent, respectively. In addition, between one-fourth and two-fifths of the younger respondents greatly overestimated the required number of training days per month (8 or more) and per year (31-90 days).

None of the market groups estimated very accurately the correct starting pay (\$40.56) for an eight-hour training day. Between only 20 and 23 percent gave estimates within the relatively wide margins of acceptance of \$30-\$49. About as many respondents (17 to 25 percent) estimated daily beginning pay at \$100 or more.

Higher proportions of respondents said that they would enlist in the Reserves or National Guard for eight years when offered hypothesized increments in the cash bonus. Raising the hypothetical bonus from \$2,000 to \$6,000 increased the likelihood of enlistment by 19 percentage points for young males, 13 percentage points for older males and young females, and 10 percentage points for older females.

Between 57 percent and 78 percent of the respondents said that there was a Guard/Reserve unit located close enough for them to join. Males were more likely to report this than females.

Between two-fifths and a little over one-half of employed respondents--the older groups more than the younger groups--believe that there are laws that protect them from losing their jobs or job seniority because of absences due to Reserve/Guard training. About the same percentages also said that their employers would hold their jobs open during the 3-6 month basic training period; these percentages tend to be somewhat



higher for respondents with positive propensity. On the other hand, one-third to two-fifths of employed respondents said that they thought they would lose job seniority while in basic training.

A minority of employed respondents (7-17 percent) assert that their employers have policies about Guard/Reserve participation. Somewhat higher proportions (about one-fifth to one-third) indicate that their employers are positive about Guard/Reserve participation. All of these perceptions are at least somewhat suspect, however, given that only 5 percent of the males and between 2 and 3 percent of the females admit to having ever discussed their employer's Guard/Reserve participation policy with their supervisor.

#### **F. Advertising Exposure and Service Images (Chapter 8)**

Advertising about military service is designed to enhance the image of the military by disseminating accurate, positive information through all available media. The assumption is that increased knowledge and positivity will increase propensity to enlist.

Overall awareness of military advertising is generally quite high, especially for the four active Services. Within the active Services, levels of advertising awareness ranged from 67 to 89 percent for the male market groups and from 63 to 86 percent for the female market groups. The Army has the highest levels of both unaided and overall awareness. Males are more aware of advertising than females. Finally, although overall levels of advertising awareness for all components of the military decreased annually from 1984 to 1986 for both young males and young females, in 1987 advertising awareness for the four active Services among the young males, and for the Army and Marine Corps among the young females increased significantly.

Seven advertising slogans were read to respondents who were then asked to identify the sponsor. The Air Force slogan, "Aim high.\_\_\_\_." was correctly identified by the largest percentage of respondents (71-91 percent), followed by the Army's slogan, "Be all you can be" (69-83 percent) and the Marine Corps' slogan, "The few, the proud, the \_\_\_\_" (65-82 percent).

The sponsor least likely to be identified accurately with its slogans was the Joint Services. Between 12 and 15 percent of respondents correctly attributed "It's a great place to start" to the Joint advertising program.

The Army is far more likely than other Services to be mentioned as the sponsor of this slogan (32-41 percent). Similarly, although less spectacularly, male respondents were almost as likely, and female respondents were more likely, to say "Don't know" as to mention the Joint Services as the sponsor for "We're not a company...we're your country." These results suggest that the Joint advertising program is achieving its goal of complementing and supplementing the advertising efforts of the four active Services, rather than competing with them.

Respondents show fairly high levels of awareness (64-86 percent) of military print and broadcast advertising in the past 12 months. Awareness of broadcast advertising is between 9 and 19 percentage points higher than print awareness levels for all market groups. The level of awareness of print advertising is much higher among young males than among the other market groups. The Army is most likely to be mentioned as the subject of advertising in both media, followed by the Air Force and the Marine Corps.

Almost one-half of the young males and almost one-fourth of the young females report receiving unsolicited literature in the past 12 months. Both groups most frequently mentioned the Army as the source of the literature. Among the young males, the Navy and the Marine Corps were next most likely to be mentioned, and among the young females the Air Force was the second most common source noted.

Respondents were asked to mention the first active Service that comes to mind for each of ten image statements. In general, the Army was mentioned most often for six of the ten statements:

- provides money for education;
- teaches valuable skills and trades;
- opportunities for promotion and advancement;
- equal pay and advancement for men and women;
- defending your country; and
- work in or near a combat zone.

The younger market groups are especially likely to think of the Army first in response to these image statements. The older market groups, especially the males, are more likely to split primary mentions between the Army and the Air Force.

The Air Force is most often mentioned as providing a high technology environment to work in, while the Marine Corps is most likely to be mentioned in response to lack of personal freedom. The Navy is thought of most often regarding extended duty away from one's immediate family.

The statement concerning assignment to work that does not prepare one for a civilian career was not consistently associated with any one Service. Between 11 and 15 percent of all market groups responded that none of the Services came to mind or refused to respond to this item; another 5 to 8 percent said "Don't know." It seems that there is a lack of substantive knowledge about what one actually does in the military, aside, perhaps, from generalized notions concerning combat versus technical or clerical skills.

#### G. Information-Seeking Activities and Propensity (Chapter 9)

In addition to processing information that is relatively passively acquired through Service-sponsored media advertising, individuals can actively seek information. Information-seeking may include phoning or mailing for information, using a computerized career information system, discussing the possibility of enlistment with someone, and taking the Armed Services Vocational Aptitude Battery (ASVAB).

Ten percent or fewer of the young respondents mailed a postcard or coupon in the past 12 months, and fewer than 5 percent made a toll-free call for information. Both of these behaviors are more likely among young males and those males and females who express positive propensity.

Of the approximately 60 percent of the respondents who report that their schools have a computerized career information system, only one-quarter of the males and one-fifth of the females have used the system to get information about the military. Of those who used the system for this purpose, positive propensity males are about twice as likely as negative propensity males to report that their interest increased by using the system. Positive propensity females are also more likely to report this than their negative propensity counterparts, although to a lesser degree.

About two-fifths of the young males, one-fifth of the older males and young females, and less than one-tenth of the older females report having discussed military service with someone in the past year. Those with positive propensity are significantly more likely than those with negative

propensity to have had such a discussion. Discussions are held most frequently with a family member, followed by a friend and, among the younger groups, a military recruiter.

The ASVAB had been taken by fewer than one-third of all respondents. Older males are more likely to have taken it than young males, followed by young and then older females. Positive propensity among the older group is associated with a greater likelihood of having taken the ASVAB. The young males and females are more likely than their older counterparts to have taken the exam at their high school, while the older groups are more likely to have taken it at a Military Entrance Processing Station (MEPS). The older groups are equally as likely to have taken the ASVAB at a high school or a MEPS.

Looking at information-seeking activities as a function of Predicted AFQT groups reveals that young male High School Seniors are more likely than High School Graduates or Younger High School Students to have mailed a postcard or coupon or to have discussed military service with someone in the past year. These data support the view that Seniors are at an enlistment decision point. Young male High School Seniors (and Younger High School Students) are, on the other hand, less likely than High School Graduates to have taken the ASVAB, an action measured on a lifetime basis. No differences were evident as a function of AFQT category.

The data for the young females do not show the same differences between educational status groups with regard to probability of having taken any actions toward enlistment. Category IIIB-V young female High School Seniors, however, are more likely than comparable High School Graduates to have mailed a postcard or coupon and to have discussed military service with someone in the past year or so. In addition, Category IIIB-V Seniors are less likely than comparable Graduates to have taken the ASVAB. Thus, the educational status differences seen for the young females are parallel to those seen for the young males, although these differences are restricted to the "lower" quality groups.

#### **H. Recruiter Contact (Chapter 10)**

Short of beginning the formal enlistment process, talking with a recruiter is the most active step one can take in seeking information about military service. Nearly half of the males and about one-fourth of the

females have ever spoken with a military recruiter to get information about the military. All groups are most likely to see an Army recruiter. Among young males and both young and older females, positive propensity is associated with increased probability of having spoken with a recruiter. The most common method of initial contact is talking to a recruiter at school--for young males and both young and older females. Older males are equally likely to have had first contact at a recruiting station or school or by getting a phone call from a recruiter.

For each of the four active Services, recruiter contact is associated with higher levels of positive propensity. Comparisons of positive propensity as a function of recruiter contact suggest there is some unevenness across the past three years among the four services for those respondents who contacted a recruiter.

Less than 15 percent of young males and 5 percent of young females have been to a recruiting station in the past 12 months. Being male and having positive propensity increase the likelihood of having visited a recruiting station.

Lifetime contact with a recruiter from any of the four active Services is highest for young male High School Graduates, followed by High School Seniors and then Younger High School Students. Lifetime contact with recruiters from the individual Services follows essentially the same pattern. In addition, being in Category IIIB-V is associated with higher levels of contact than being in Category I-IIIA among young male High School Graduates and High School Seniors. Contact with a recruiter from any of the Services in the past 12 months is greatest among High School Seniors, followed by High School Graduates, and is lowest among Younger High School Students. Graduates and Seniors show relatively similar levels of contact within each of the individual Services. Category IIIB-V Seniors showed a higher level of contact than Category I-IIIA Seniors.

Overall, among young females, High School Graduates and High School Seniors show similar levels of lifetime recruiter contact. In addition, Category IIIB-V Seniors report higher levels of contact than Category IIIB-V Younger High School Students. Category IIIB-V Seniors show a higher level of contact within the past 12 months than Category IIIB-V Graduates or Younger High School Students. For both lifetime and recent contact with

recruiters from individual Services, most of the differences between groups do not reach conventional levels of statistical significance.

The Army has the highest rates of recruiter contact, with the other Services showing lower, but similar, rates of contact.

Young male High School Graduates and Seniors are equally likely to have visited a recruiting station in the past 12 months and are more likely to have done so than Younger High School Students. Among the young females, only Category IIIB-V High School Graduates show higher levels of contact than any of the other educational status or Predicted AFQT groups.

Compared with those who did not report recruiter contact, young males and young females who do report having recruiter contact in the past 12 months are more likely to:

- be 18-19 years old;
- be Black;
- want more education;
- hold a positive attitude toward serving in the military;
- tell a good friend that seeing a recruiter is a good idea; and
- report that important others are perceived as favorable toward the respondent serving in the military.

In addition, among young males, those with contact were more likely to be never married, unemployed students, currently in their senior year of high school or beyond and to have a friend or relative who enlisted in the military in the past six months.

### **I. Predicting Active Propensity (Chapter 11)**

Multiple regression analysis is the multivariate technique that was used to examine the effect on propensity of a number of variables simultaneously while controlling for confounding due to intercorrelations among variables. This type of analysis provides a more precise view of the data.

Multiple regression analyses were performed on the young male and young female data. The criterion (predicted) variable was Positive Composite Active Propensity. Independent (predictor) variables included sets of sociodemographic characteristics, psychological/behavioral measures, and interactions of selected key variables. Three models were tested for each market: a sociodemographic model, a combined model which included sociodemographic and psychological/behavioral variables, and an overall model that included all variables from the combined model plus interactions among selected variables.

For young males, the sociodemographic model accounted for 16 percent of the variance in predicting positive active propensity, while the combined model accounted for 39 percent of the variance. The overall model, which incorporated interactions, accounted for 42 percent of the variance. The results of these three regression analyses indicated that age, predicted AFQT, and attitude toward serving were the most important predictors of propensity. Age and predicted AFQT had strong negative relationships with propensity, while attitude toward serving had a strong positive relationship with propensity. Previous conversations with others about the military also was a positive predictor of propensity.

The strongest single predictor of propensity for young males was attitude toward serving. However, the overall model indicated strong interactions of both age and predicted AFQT with attitude toward serving in predicting propensity. Older respondents showed both overall lower propensity and a smaller relationship of attitude toward serving with propensity than did younger respondents. Respondents with high predicted AFQT had both overall lower propensity and a smaller relationship of attitude toward serving with propensity than did respondents with low predicted AFQT.

All three regression models proved to be somewhat less effective in predicting positive propensity for young females than for young males. The sociodemographic model accounted for 12 percent, the combined model for 33 percent, and the overall model with interactions for 38 percent of the variance for young females. The most important predictors of propensity were the same as those found in the male regression models. However, the overall propensity for females was lower than for males, and regression parameters in the female models were generally smaller than the comparable

parameters in the male models. Age, predicted AFQT, and attitude toward service did not predict propensity as strongly for females as they did for males. Age and predicted AFQT interacted strongly with attitude toward the military in the prediction of propensity for females but, again, not as strongly as for males.

Psychological/behavioral variables, especially attitude toward service, played a larger role than sociodemographic variables in predicting propensity for both males and females. The sociodemographic variable of age and, especially, predicted AFQT were also important. Age and predicted AFQT also moderated the influence of attitude toward service on positive propensity. The interaction with respect to propensity of predicted AFQT with attitude toward service is especially important in that it suggests that high "quality" respondents with a positive attitude toward the military are less likely to express positive propensity than low "quality" respondents with a positive attitude. Also, older respondents with a positive attitude toward service were less likely to express positive propensity than younger respondents with a positive attitude. Thus, although strategies designed to increase positive attitudes may increase positive propensity in general, they probably are less effective for high quality and older youth than for low quality, younger youth.



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Appendix A

Sampling Design, Estimation Procedures and Estimated Sampling Errors

## Appendix A

### Sampling Design, Estimation Procedures and Estimated Sampling Errors

This appendix summarizes the main elements of the sampling design, estimation procedures and estimated sampling errors for the 1987 YATS II survey. Additional details about the procedures appear in technical reports by Immerman, Wheelless and Mason (1987a,b).

#### A. Populations of Inferential Interest

The 1987 YATS survey was designed to provide estimates of parameters describing four populations, defined as:

- males aged 16 to 21 years
- females aged 16 to 21 years
- males aged 22 to 24 years
- females aged 22 to 24 years
- who reside in the coterminous United States in households or noninstitutional group quarters with telephones
- who have never served in the military, and are not currently accepted for military service
- who have completed less than two years of college or equivalent post secondary school education.

The population parameters upon which the sampling design were based on the proportions of each population having a propensity toward active duty service. The 1986 YATS survey provided the propensity proportions used to design the 1987 sample.

#### B. Design Requirements

The YATS survey data provide national level estimates of parameters describing each of the four populations. Additionally, parameter estimates describing subpopulations or domains of the young male population, defined by Management Unit Designator (MUD) areas, are required by each of the Services.

Design requirements are specified in terms of the maximum values of the standard errors to be associated with the estimates for each of the reporting domains. The values set for the 1987 survey are summarized in Table A.1. Control over the geographic distribution of the sample is actually provided in terms of the geographic areas associated with Military Entrance Processing Stations (MEPS) rather than MUDS. For design purposes, MUD areas were classified into MEPS. Approximate geographic classifications were used in cases where MUD boundaries were not coincident with MEPS boundaries.

### C. Sampling Design

The 1987 YATS II has a stratified, two-stage sampling design. Stratification variables are defined in terms of the geographic areas of the MEPS, involving a total of 66 strata. First-stage sampling units are clusters of households formed by the first eight digits of ten-digit telephone numbers. First-stage calls used the following procedure.

- A national listing of active NPA (i.e., area) codes and NXX (i.e., three-digit exchange) codes was used to form the first six digits of phone numbers.
- Basic Exchanges were formed by subtending all possible digits in positions seven and eight to the NPA-NXX codes (e.g., 202-325-01XX, 202-325-02XX).
- Eight-digit exchanges were selected at random for calling.
- Random digits were added in positions 9 and 10.
- The eight-digit exchange was designated as a cluster when the ten-digit number called identified a household.
- Another eight-digit exchange was randomly selected for calling if the ten-digit number did not produce a household.

For stratification purposes, clusters were classified into MEPS based on the county in which the Rate Center City for the NPA (i.e., area) and NXX (i.e., telephone exchange) codes is located. Second-stage sampling units are households.

Second-stage calls used the following procedure.

- Clusters identified in stage-one calls were used to form the first eight digits of telephone numbers.
- All possible terminal two-digit sequences were appended to the cluster exchanges to form the set of telephone numbers (e.g., 202-325-0100, 202-325-0101, ...202-325-0199) eligible to be called.

Table A.1. Precision Requirements Used to Design the 1987 Sample

Market/Reporting Domain	Required Precision <sup>1</sup>
<u>Young Males</u>	
National level estimates	0.0100
Estimate for any MUD <sup>2</sup> with a total population	
<199,999	0.2250
200,000 - 249,999	0.0650
250,000 - 299,999	0.0550
300,000 - 349,999	0.0500
≥350,000	0.0287
<u>Older Males</u>	
National level estimates	0.0102
<u>Young Females</u>	
National level estimates	0.0175
<u>Older Females</u>	
National level estimates	0.0175

<sup>1</sup>Precision stated in terms of the maximum value of the standard error to be associated with the estimated proportion of persons in each reporting domain with a propensity for active service.

<sup>2</sup>Management Unit Designator (i.e., Any Recruiting Battalion, Navy Districts, Marine Corps Stations, and Air Force Squadrons).

- A set of randomly selected telephone numbers within a cluster was called to identify the designated number of households.

The Mitofsky/Waksberg random digit dialing procedure (Waksberg, 1978) was used to construct the clusters and select the sample. The procedure produces an equal probability sample of households within each MEPS. In the case of the 1987 YATS II, the procedure was applied within each of 66 Military Entrance Processing Station (MEPS) areas. NPA-NXX codes were allocated to counties based on the county in which the Rate Center City for the NXX code was located. Counties were then classified into MEPS areas, forming nonoverlapping units which, in the aggregate, completely accounted for the geographic area of the 48 contiguous states and the District of Columbia.

Table A.2 presents the distribution of the designed sample for young males. The total sample called for 106,477 households in 13,200 clusters. On average, each cluster in the sample consisted of 8.1 households, although cluster sizes varied across MEPS.

The number and sizes of sample clusters allocated to each MEPS area were determined so as to satisfy the precision requirements in Table A.1 for the least cost given several practical considerations. This meant finding the least-cost allocation solution that met the variance constraints for young males. Equations describing data collection costs and sampling variances in terms of the number of sample clusters and sample housing units were developed for each MEPS. The equations were solved simultaneously for the first- and second-stage sample sizes and the allocation of each across MEPS, using numerical procedures based on Kuhn/Tucker theory (Simmons, 1975, pp. 169-209).

The sample resulting from the allocation procedure was expected to contain more than the required number of older males and females. This inefficiency was overcome by fielding the sample in waves. Based on expectations of the numbers of older males and females likely to be identified, clusters were randomly classified into four waves. Individuals in all four market groups were interviewed in wave 1 clusters, males and older females only were interviewed in wave 2 clusters, only males were

Table A.2. Designed Distribution of the 1987 Young Male Sample

MEPS* Number	MEPS Name	Number of Sample Clusters	Households Per Cluster	Total Sample Households
1	Portland, ME	150	14	2100
2	Manchester, NH	45	15	675
3	Boston, MA	234	7	1638
4	Springfield, MA	207	8	1656
5	New Haven, CT	217	7	1519
6	Albany, NY	88	11	968
7	Fort Hamilton, NY	521	7	3647
8	Newark, NJ	242	6	1452
9	Philadelphia, PA	309	6	1854
10	Syracuse, NY	57	11	627
11	Buffalo, NY	189	9	1701
12	Wilkes-Barre, PA	81	10	810
13	Harrisburg, PA	95	9	855
14	Pittsburg, PA	209	10	2090
15	Baltimore, MD	165	11	1815
16	Richmond, VA	220	8	1760
17	Beckley, WV	204	10	2040
18	Knoxville, TN	123	6	738
19	Nashville, TN	92	10	920
20	Louisville, KY	172	10	1720
21	Cincinnati, OH	175	9	1575
22	Columbus, OH	201	9	1809
23	Cleveland, OH	302	6	1812
24	Detroit, MI	278	9	2502
25	Milwaukee, WI	141	12	1692
26	Chicago, IL	479	7	3353
27	Indianapolis, IN	143	9	1287
28	St. Louis, MO	173	11	1903
29	Memphis, TN	106	10	1060
30	Jackson, MS	69	10	690
31	New Orleans, LA	238	7	1666
32	Montgomery, AL	213	9	1917
33	Atlanta, GA	202	9	1818
34	Fort Jackson, SC	202	9	1818
35	Jacksonville, FL	127	8	1016
36	Miami, FL	491	4	1964
37	Charlotte, NC	216	8	1728
38	Raleigh, NC	211	9	1899
39	Shreveport, LA	72	8	576
40	Dallas, TX	158	11	1738



Table A.2 (continued)

MEPS* Number	MEPS Name	Number of Sample Clusters	Households Per Cluster	Total Sample Households
41	Houston, TX	251	7	1757
42	San Antonio, TX	203	9	1827
43	Oklahoma City, OK	149	12	1788
44	Amarillo, TX	20	15	300
45	Little Rock, AR	128	12	1536
46	Kansas City, MO	122	15	1830
47	Des Moines, IA	105	16	1680
48	Minneapolis, MN	138	12	1656
49	Fargo, ND	13	20	260
50	Sioux Falls, SD	32	21	672
51	Omaha, NE	68	16	1088
52	Denver, CO	160	10	1600
53	Albuquerque, NM	65	10	650
54	El Paso, TX	90	9	810
55	Phoenix, AZ	212	8	1696
56	Salt Lake City, UT	74	11	814
57	Butte, MT	26	19	494
58	Spokane, WA	40	12	480
59	Boise, ID	35	12	420
60	Seattle, WA	163	8	1304
61	Portland, OR	183	9	1647
62	Oakland, CA	398	7	2786
63	Fresno, CA	210	9	1890
64	Los Angeles, CA	1920	5	9600
68	San Diego, CA	297	7	2079
69	Tampa, FL	281	5	1405
	U.S.	13,200	8.1	106,477

Note: There are a total of 69 MEPS of which 66 are located in the coterminous U.S. and, thus, were included in the sample. Numbers 65, 66, and 67 denoting Honolulu, San Juan, and Anchorage were not included in the study.

\*Military Entrance Processing Station (MEPS) numbers as recorded in the DMDC Recruit Market Network.

interviewed in wave 3 clusters, and only young males were interviewed in wave 4 clusters. The number of clusters in each wave was determined to provide the required differential sampling rates and, at the same time, to preserve the MEPS-level allocation of the sample.

Several weeks after the survey started, it became apparent that certain analytical requirements for older males would not be met under the original sampling design. To remedy this situation, some clusters originally worked under wave 4 were fielded as wave 3 clusters.

#### D. Estimation Procedures

The Mitofsky/Waksberg sampling procedure used in YATS II generates a self-weighting sample of households within each of 66 geographic areas defined by MEPS. The actual household level selection probabilities and, therefore, the sampling weights, are unknown. As a consequence, ratio estimation procedures (Kendall and Stuart, 1966, Chapter 6) are required to estimate parameters that describe any population or domain that resides in more than one MEPS.

Ratio estimates are computed using the sample data plus auxiliary population level information supplied independently of the sample and assumed known. First, per sampling unit (i.e., household level) averages are computed for each MEPS. The averages are then multiplied by the current (known) number of households in the MEPS and the products summed across MEPS to obtain the estimated total of interest. Population means and proportions are estimated by first computing the numerator and the denominator totals and then dividing these to obtain the mean or the proportion (Cochran, 1963, pp. 169-170). Regression relations are estimated using a multivariate extension of the estimator for means (Shah, Holt, and Folsom, 1977).

Although the actual sampling weights are unknown, it is convenient to consider the quantities:

$$w(h) = \frac{N(h)}{\sum_{i=1}^I n(h,i)} \quad ,$$

where  $h = 1, 2, \dots, 66$  denotes MEPS,

$i = 1, 2, \dots, n(h)_1$  denotes the cluster, there being a total of  $n(h)_1$  clusters in the  $h$ -th MEPS,

$N(h)$  = the known total of households in the  $h$ -th MEPS at the time the survey was conducted, and

$n(h, i)_2$  = the number of sample households in the  $i$ -th cluster in the  $h$ -th MEPS,

as analytical weights. Estimates of MEPS-level domain totals can then be written as

$$\hat{T}_d(h) = \sum_{i=1}^{n(h)_1} \sum_{j=1}^{n(h, i)_2} w(h) t(h, i, j)_d,$$

where  $d$  = the domain of interest, and

$t(h, i, j)_d$  = the total value of the observation values belonging to domain  $d$  in the  $j$ -th sample household of the  $i$ -th cluster of the  $h$ -th MEPS.

Since persons within households were not subsampled, the same analytical weights can be applied to the person-level records.

Missing data compensation was undertaken at the levels of missing households and missing persons and was implemented by modifying the analytical weights. Weighting class adjustments were made at MEPS-levels.

Variance and covariance estimates for linear statistics were computed based on equal probability with replacement sampling of clusters from within MEPS (Kendall and Stuart, 1966, pp. 200-201). The variances of nonlinear statistics are computed using first order Taylor series linearizations (Shah et al., 1977).

## E. Estimated Sampling Errors

The procedures and methodology described here are presented to help the reader use the estimates of sampling errors that have been calculated and printed for various proportions in this report and to enable the reader to estimate sampling errors for those proportions for which standard errors do not appear in parentheses in the tables. The estimates produced from the YATS II survey are based on a probability sample of the population rather than the entire population and, hence, are subject to sampling variability. Sampling variability occurs because observations are made only on a sample, not on the entire population. The particular sample used in this survey is one of many that could have been selected using the same sample design. Estimates derived from different samples differ from each other. The standard error of a survey estimate is a measure of the variation among the estimates from all possible surveys. Thus, the standard error is a measure of the precision with which an estimate from a particular sample approximates the average result of all possible samples.

### 1. Confidence Intervals and Significant Differences

Confidence intervals, or ranges that are very likely to include the true population value, can be constructed using the standard errors. The 95 percent confidence interval is computed by adding to and subtracting from the estimated proportion the result of multiplying 1.96 times the standard error for that cell. (Obviously, for very small or very large estimates, the respective smallest or largest value in the confidence interval range will be zero or 100 percent.) The interpretation of the confidence interval range is that, if the study were to be repeated with 100 identically-drawn random samples, 95 of the sample estimates would fall within the confidence interval range; thus, we are 95 percent certain that the true population value also lies within that range. Clearly, for a given confidence level (e.g., 95 percent), smaller standard errors indicate that the cell proportions estimate the true population value more precisely while larger standard errors indicate that the true population value is estimated less precisely.

In tables where standard errors do not appear, the analyst/reader may estimate approximate standard errors by referring to a similar table that shows standard errors. The table chosen for reference should show standard

errors for the same groups (e.g., young males with positive and negative propensity) for which an estimated standard error is needed and should show all percentages within subgroups that are equal to the percentages for which standard errors are desired. Given similarly defined groups, one may assume that the error associated with any estimate in a cell (i.e., percentage or mean) is approximately equal to or larger than that of an equal-sized point estimate. Appendix C Tables C.3a and C.3b may be useful reference tables since they show a range of percentage estimates with standard errors for the four market groups and, within that, for propensity groups. As an example of approximate standard errors, consider the estimates of positive and negative propensity in Table 5.2 (for which standard errors are not indicated). For the item on full-time work for young males, standard errors associated with estimates of positive (25.3 percent) or negative (31.0 percent) propensity can be approximated from the data in Table C.3a for "Not attend school." These percentage distributions closely approximate those in Table 5.2 and would suggest a standard error of approximately 1.4 percent for positive propensity and 1.0 percent for negative propensity.

For any particular percentage resulting from a sampling survey, it is not possible to know the exact amount of error that has resulted from sampling. It is possible, however, to establish estimated "confidence intervals," ranges that are very likely to include the true population values. For example, Table 3.1 shows that 32.4 percent of the young males in the 1987 sample reported positive propensity for at least one active Service with a standard error of 0.8 percent. It is possible to set up a 95 percent confidence interval, which means that 95 percent of the intervals computed in a large number of repeated surveys will include the true (population) proportion. The 95 percent confidence interval is formed by multiplying the standard error by 1.96 and then adding this result to the estimate to form the upper bound and subtracting this result from the estimate to form the lower bound. In this case, the lower and upper limits of the 95 percent interval are 30.8 percent and 34.0 percent (i.e.,  $32.4 \pm (1.96 \times 0.8)$ ).

## F. Factors Influencing the Size of Confidence Intervals in this Report

From a statistical standpoint, the most straightforward types of samples are simple random samples. In such samples the confidence limits for a percentage are simple functions of the percentage value and the size of the sample or subgroup on which it is based. For example, the 95 percent confidence interval for a proportion (p) can be approximated by:  $p \pm 1.96 \sqrt{p(1p)/(N1)}$ . In a more complicated sample, such as the one used in this survey, other factors are also involved in the determination of confidence limits.

### 1. Number of Cases (N)

When other things are equal, the larger a sample, the more precise will be an estimate based thereon and, therefore, the narrower the confidence levels. One of the factors is  $1/\sqrt{N}$ , the reciprocal of the square root of the size of the sample. Thus a sample of 400 will, ceteris paribus, have a confidence interval just half as wide as that for a sample of 100, because  $1/\sqrt{400}$  is just half of  $1/\sqrt{100}$ .

### 2. Population Variance

Other things again being equal, percentage values around 50 percent have the largest confidence intervals because  $\sqrt{p(1p)}$  (where p is a proportion between 0.0 and 1.0) is also a factor affecting the size of a confidence interval. This factor will be only three-fifths as large for 10 percent or 90 percent as for 50 percent since  $\sqrt{.1 \times .9}$  is 3/5 of  $\sqrt{.5 \times .5}$ .

### 3. Design Effects in Complex Samples

Under simple random sampling, a confidence interval can be determined from the two factors just described and the appropriate constant for the confidence level desired (e.g., 1.96<sup>1</sup> for 95 percent, assuming degrees of freedom are very large). Stratification, clustering and differential selection probabilities (all involved in this survey) also influence sampling error. Stratification tends to increase precision.

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<sup>1/</sup> As a general rule, 1.96 may be rounded to "2" in the calculation of confidence intervals.

Clustering and over-sampling of subpopulations may either increase precision or reduce it. Estimates of subpopulations can be made much more cheaply using complex samples rather than simple random samples, but complex samples often yield less precise total population estimates than would simple random samples of the same size. Accordingly, use of the simple formula would generally underestimate the sampling error involved.

Kish (1965, p. 258) defined a method for correcting for this underestimation, known as the design effect (DEFF). The correction term is:

$$DEFF = \frac{\text{actual sampling variance}}{p(1p)/N}$$

If, therefore, the actual sampling variance for a proportion  $p$  is four times the value computed for a simple random sample of the same size  $N$ , the DEFF is 4.0. Because a confidence interval is based on the square root of the variance, any confidence interval set up would have to be twice as wide as the corresponding interval based on a simple random sample. The complex sample would have to be four times as large to have the same confidence interval as the simple random sample.

A simple way of using a DEFF value is to divide the actual sample size by it and obtain the "effective  $N$ ," the size of a simple random sample that would have resulted in the same degree of precision. For example, with a DEFF of 4.0 and an actual sample size of 4,000, the "effective  $N$ " is 1,000.

The value of the "effective  $N$ " can be used in the simple formula  $\sqrt{p(1p)/N}$  to compute standard errors of estimate and confidence interval limits. It is therefore possible to use formulas and tables appropriate for simple random samples, regardless of the actual type of sample, by converting the sample size to the "effective  $N$ ."

Actually, every statistic derived from a complex sample has its own design effect, different from all of the others. In practice, however, DEFF values are generally computed only for a cross-section of the statistics, and averages are computed and applied to those of the same types. Often a single average DEFF is used for all percentages.

In this study, standard errors have been computed for many estimated proportions. These calculations incorporated the appropriate sample sizes, proportions, and correction for design effects. In tables (or for groups) where standard errors do not appear, a reasonable rule-of-thumb is that the sampling error associated with any point estimate is equal to or slightly larger than the standard error presented with an equal-sized estimated proportion in table cells defined by similar characteristics (e.g., market group, composite propensity group). The analyst/reader may estimate approximate standard errors, then, by referring to a table that shows estimated standard errors. The table chosen for reference should show standard errors for the same groups (e.g., young males with positive or negative propensity) for which an estimated standard error is needed and should show percentages within groups that are approximately equal to the percentages for which standard errors are desired. Appendix C, Tables C.3a and C.3b may be a useful reference table since they show a range of percentage estimates with standard errors for the four market groups and, within that, for propensity groups.

There are two general properties of standard errors of percentages that the analyst/reader should keep in mind when using a reference table to estimate an approximate standard error. Think of percentages as lying along a range from 0 percent to 100 percent.

- Standard errors are the largest in the middle of the range 0-100 percent, and smallest at either end.

That is, for a given sample size (i.e., similarly defined group), standard errors of percentages become larger as the percentages increase from 0 percent to 50 percent, then become smaller as the percentages continue to increase from 50 to 100 percent.

- Standard errors for percents that are equidistant from 50 percent in the range, 0-100 percent, are equal (for a given sample size).

For example, for a given sample size (i.e., similarly defined group), the standard error for 60 percent is equal to the standard error for 40 percent (50 percent plus/minus 10 percent). The standard error for 80 percent is equal to the standard error for 20 percent (50 percent plus/minus 30 percent).



For example, one may estimate approximate standard errors for the figures for propensity groups in Table 5.1 using Tables C.3a and C.3b as reference tables. Table 5.1 shows that 13 percent of older females with negative propensity said that they would be working as waitresses in the next few years. To estimate an approximate standard error for this figure, one searches down the older female-negative propensity column in Table C.3b. Although there is no 13 percent in this column, the column does have a cell with 87 percent (equidistant from 50 percent) with a standard error of 1.4. Table 5.1 shows that 34 percent of positive propensity young males said that they would be working at a desk in a business office. Searching down the young male-positive propensity column in Table C.3a, one finds a standard error of 1.4 for 34 percent.

Appendix B

Data Collection Procedures, Survey Response Data and Performance Rates

## Appendix B

### Data Collection Procedures, Survey Response Data and Performance Rates

This appendix presents a detailed description of the data collection procedures used in the 1987 YATS II survey as well as survey response data and performance rates.

#### A. Data Collection Procedures

This section summarizes the YATS II data collection methods and procedures and describes the CATI system and the phased approach to data collection.

##### 1. CATI System

The 1987 YATS II survey used a CATI system for all phases of the data collection. With this system, the questionnaires for screening (i.e., questionnaires used to determine if a telephone number served a household and if any individuals in the household were eligible to be interviewed), interviewing, and verifying were programmed, entered, and stored within the computer. Questions were displayed for interviewers in program-controlled sequences on computer terminal screens. Telephone interviewers read each question as it was relayed from the computer to the viewing screen. Routing, branching, or skip patterns were programmed so that questions appeared on the screen in the proper sequence. Interviewers entered respondents' answers, which then appeared on the screen for verification.

With CATI, the computer edits the data using a programmed set of consistency checks as interviewers enter respondents' answers. These checks test for valid codes, response consistency, and completeness, thereby permitting differences to be resolved in the ongoing interview.

##### 2. Phased Approach to Data Collection

Telephone screening and interviewing were done in two phases during a 15-week period from July 26 to November 3, 1987. Phase 1 consisted of dialing to identify households. Phase 2 consisted of screening and interviewing young males and females, and older males and females. Each phase is discussed below.

a. Phase 1: Dialing. Phase 1 calling corresponded to stage-one and stage-two calls of the sampling design discussed in Appendix A and consisted of identifying households. Randomly selected exchanges were called to identify clusters or primary numbers that contained households and, additionally, to select numbers within the clusters. The procedures simply required dialing a sampled number and, if someone answered, asking if the number served a residence, business, or something else. In addition, a quick screening was conducted to determine whether the household contained persons between the ages of 15 and 25 who were potentially eligible for the study. (Even though the study only used persons aged 16-24, initial screening asked about ages 15 to 25 to avoid eliminating potential eligibles before more thorough screening.) Residential numbers containing potential eligibles were passed on to be worked in Phase 2. Numbers that were not households were classified as nonworking, business or institution, no result from dial, or answering machines. If no determination was made after five calls in different time periods, the number was classified as ring, no answer, or busy, as appropriate.

Resolution of 238,953 sample telephone numbers that were worked in an attempt to identify enough residential numbers to meet the sampling design demands produced 97,599 households. These were passed on to Phase 2. Phase 1 calling required 63,702 sample numbers to identify the 13,219 clusters (an identification rate of 20.8 percent) and 175,251 secondary sample numbers to identify 84,380 household numbers (an identification rate of 48.2 percent).

b. Phase 2: Screening and Interviewing. Numbers identified as households in Phase 1 were dialed for a more thorough screening in Phase 2. Numbers found not to be households (i.e., since Phase 1, the number had become nonworking or was no longer a residence) were replaced with new sample numbers. At the conclusion of the data collection period, 93,767 working residential numbers had been identified from the 97,599 numbers screened in Phase 2.

When a Phase 2 number was identified as a working residential telephone number, the interviewer screened the household to identify individuals eligible for the study. Overall, 13,346 persons eligible for the study were identified and selected for interviews. (All eligible young males were selected for interviewing; older males, older females, and young females were subsampled.) Unique interviews were obtained from 10,415 persons (5,219 young males, 1,017 older males, 3,177 young females and 1,002 older females). An additional 856 interviews were randomly selected for replication (duplication)<sup>1</sup> in clusters where all 100 possible telephone numbers had been exhausted without finding the number of households required by the sampling design. This resulted in 11,271 total Phase 2 analysis interviews (5,642 young males, 1,103 older males, 3,448 young females, and 1,078 older females).

#### B. Survey Response Data and Performance Rates

Performance rate information is important to assess the quality of survey field operations and the potential for nonresponse bias in the data. To compute the performance rates for the 1987 YATS II survey among the age groups of interest, response data for each of several levels must first be ascertained. These levels are the:

- Designed first-stage sample size (clusters)
- Total clusters identified
- Total clusters screened
- Designed second-stage sample size (households)
- Total households identified
- Total households screened
- Total eligibles identified and selected for inclusion in the sample
- Total number of questionnaires usable for analysis

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<sup>1</sup>/ This was done to comply more closely with the assumptions for computing variance estimates under a Mitofsky/Waksberg design (see Appendix A).

This information allows computation of various performance rates. Five different rates were computed for the 1987 YATS II data: (a) cluster screening rate, (b) household identification rate, (c) household screening rate, (d) interview completion rate, and (e) total response rate.

Response data and performance rates along with their definitions are presented for the four market groups in Table B.1. For the young male sample, 13,200 clusters were initially targeted for identification. The sample yield slightly exceeded the target, and 13,219 were successfully screened. A total of 91,965 households were targeted for the second-stage frame for the young male sample. Calls identified 97,599 (106.1 percent) households, of which 93,767 (96.1 percent) were successfully screened. The second-stage frame specified 83,494 households for the older male sample, 56,785 households for the young female sample, and 63,195 households for the older female sample. The household screening rates were 95.9 percent for older males, 95.8 percent for young females, and 95.8 percent for older females.

Interview completion rates were highest among young females (80.8 percent) and young males (80.3 percent), followed by older females (72.1 percent), and older males (66.8 percent). Final response rates, which were computed by multiplying the interview completion rates by the household screening rates, were 77.1 percent for young males, 64.1 percent for older males, 77.4 percent for young females, and 69.1 percent for older females.

Numerous calls and attempts to overcome initial refusals were conducted to complete household screening for all sample numbers and to administer a questionnaire to all selected eligibles. A thorough effort was made to obtain the highest possible response rates within the given schedule constraints.

Table B.1. 1986 YATS Response Data and Performance Rates

Item	Young Males	Older Males	Young Females	Older Females
<u>Response Data</u>				
1. First-stage sample size (clusters)	13,200	11,994	8,102	9,000
2. First-stage sample size screened <sup>a,b</sup>	13,219	12,007	8,141	9,034
3. Second-stage sample size (households)	91,965	83,494	56,785	63,195
4. Second-stage units identified <sup>b</sup>	97,599	88,922	60,575	67,373
5. Second-stage units screened <sup>c</sup>	93,767	85,263	57,999	64,550
6. Total eligibles identified/selected	6,502	1,522	3,933	1,389
7. Completed interviews	5,219	1,017	3,177	1,102
8. Analysis interviews <sup>d</sup>	5,642	1,103	3,448	1,078
<u>Performance Rates</u>				
9. Cluster screening rate (2÷1)	100.1	100.0	101.0	100.0
10. Household identification rate (4÷3)	106.1	107.5	106.7	106.6
11. Household screening rate (5÷4)	96.1	95.9	95.8	95.8
12. Interview completion rate (7÷6)	80.3	66.8	80.8	72.1
13. Overall response rate (11 x 12)	77.1	64.1	77.4	69.1

<sup>a</sup>To be counted, complete screening information was required from at least one household in the cluster.

<sup>b</sup>Note that lines 2 and 4, which indicate the obtained sample size, are larger than corresponding lines 1 and 3, which represent the number of households specified by the sample design. During data collection, more households were identified than were required.

<sup>c</sup>To be counted, complete screening information was required for each household.

<sup>d</sup>Final numbers used for data analysis. Sampling was done with replacement so interviews were randomly replicated (i.e., the record was copied) in clusters where all 100 possible numbers were called, but the required number of households specified by the sampling design was not obtained.

Appendix C

Supplementary Tables



Table C.1. Service-Specific and Composite Active Propensity

Market/Item Response	Composite <sup>a</sup>	Army	Navy	Marine Corps	Air Force
<u>Young Males</u>					
Definitely	8.3 (0.5)	2.5 (0.3)	1.7 (0.2)	2.1 (0.2)	3.6 (0.4)
Probably	24.1 (0.7)	13.0 (0.6)	10.7 (0.6)	9.3 (0.5)	14.6 (0.6)
Total Positive	32.4 (0.8)	15.5 (0.7)	12.3 (0.6)	11.4 (0.5)	18.2 (0.7)
Probably Not	28.4 (0.8)	32.5 (0.8)	33.0 (0.8)	31.6 (0.8)	32.7 (0.8)
Definitely Not	39.1 (0.9)	51.9 (0.9)	54.5 (0.9)	56.9 (0.9)	48.8 (0.9)
Don't Know/Refuse	0.1 ( **)	0.2 (0.1)	0.2 (0.1)	0.1 ( **)	0.3 (0.1)
Total Negative	67.6 (0.8)	84.5 (0.7)	87.7 (0.6)	88.6 (0.5)	81.8 (0.7)
<u>Older Males</u>					
Definitely	1.7 (0.4)	0.4 (0.2)	0.6 (0.3)	0.8 (0.3)	1.0 (0.3)
Probably	14.4 (1.3)	8.0 (1.0)	6.1 (0.8)	4.9 (0.7)	7.9 (0.9)
Total Positive	16.1 (1.3)	8.4 (1.0)	6.7 (0.9)	5.7 (0.8)	8.9 (1.0)
Probably Not	24.3 (1.5)	25.6 (1.5)	25.7 (1.5)	25.2 (1.5)	25.4 (1.5)
Definitely Not	59.5 (1.7)	65.8 (1.7)	67.5 (1.7)	69.1 (1.6)	65.6 (1.7)
Don't Know/Refuse	0.1 (0.1)	0.2 (0.1)	0.1 (0.1)	0.1 (0.1)	0.1 (0.1)
Total Negative	83.9 (1.3)	91.6 (1.0)	93.3 (0.9)	94.3 (0.8)	91.1 (1.0)
<u>Young Females</u>					
Definitely	2.1 (0.3)	0.8 (0.1)	0.4 (0.1)	0.4 (0.1)	1.0 (0.2)
Probably	12.9 (1.1)	6.1 (0.8)	4.9 (0.8)	3.2 (0.5)	7.5 (0.7)
Total Positive	15.0 (1.1)	6.8 (0.8)	5.3 (0.8)	3.6 (0.5)	8.6 (0.8)
Probably Not	18.1 (0.9)	18.5 (1.1)	19.0 (1.1)	19.1 (1.1)	19.6 (1.2)
Definitely Not	66.9 (1.3)	74.6 (1.3)	75.6 (1.3)	77.3 (1.2)	71.8 (1.3)
Don't Know/Refuse	0.0 ( **)	0.1 (0.1)	0.1 (1.3)	0.0 ( **)	0.0 ( **)
Total Negative	85.0 (1.1)	93.2 (0.8)	94.7 (0.8)	96.4 (0.5)	91.4 (0.8)
<u>Older Females</u>					
Definitely	0.8 (0.3)	0.4 (0.2)	0.4 (0.2)	0.2 (0.2)	0.2 (0.2)
Probably	3.9 (0.6)	1.9 (0.4)	1.7 (0.4)	1.3 (0.4)	3.1 (0.6)
Total Positive	4.7 (0.7)	2.2 (0.5)	2.1 (0.5)	1.5 (0.4)	3.3 (0.6)
Probably Not	15.0 (1.8)	14.0 (1.8)	13.0 (1.8)	12.6 (1.8)	14.5 (1.8)
Definitely Not	80.3 (1.9)	83.7 (1.8)	84.8 (1.8)	85.8 (1.8)	82.2 (1.8)
Don't Know/Refuse	0.1 (0.1)	0.1 (0.1)	0.1 (0.1)	0.1 (0.1)	0.1 (0.1)
Total Negative	95.3 (0.7)	97.8 (0.5)	97.9 (0.5)	98.5 (0.4)	96.7 (0.6)

Note: Tabled values are column percentages with standard errors in parentheses. Estimates are based on interviews with 5,642 young males, 1,103 older males, 3,448 young females and 1,078 older females. Total positive and total negative values may differ slightly from the sum of their respective components due to rounding error.

<sup>a</sup>Propensity to serve in at least one active Service.

\*\*Informative standard error not available.

Source: Questions 510-513.

Table C.2. Propensity to Enlist in the National Guard and Reserves

	National Guard		Reserve		Composite Reserve Propensity	
<u>Young Males<sup>a</sup></u>						
Definitely	0.7	(0.1)	1.8	(0.3)	2.2	(0.3)
Probably	12.6	(0.6)	14.9	(0.6)	18.9	(0.7)
Total Positive	13.3	(0.6)	16.7	(0.7)	21.1	(0.7)
Probably Not	34.9	(0.8)	36.6	(0.9)	34.8	(0.8)
Definitely Not	51.5	(0.9)	46.5	(0.9)	44.0	(0.9)
Don't Know/Refused	0.2	(0.1)	0.2	(0.2)	0.0	(**)
Total Negative	86.7	(0.6)	83.3	(0.7)	78.9	(0.7)
<u>Older Males<sup>b</sup></u>						
Definitely	0.4	(0.2)	0.5	(0.2)	0.8	(0.3)
Probably	8.7	(1.0)	10.0	(1.0)	13.1	(1.2)
Total Positive	9.1	(1.0)	10.5	(1.0)	13.9	(1.2)
Probably Not	27.3	(1.5)	27.3	(1.6)	26.2	(1.5)
Definitely Not	63.5	(1.7)	62.0	(1.7)	59.8	(1.7)
Don't Know/Refused	0.1	(0.1)	0.3	(0.2)	0.1	(0.1)
Total Negative	90.9	(1.0)	89.5	(1.0)	86.1	(1.2)
<u>Young Females<sup>a</sup></u>						
Definitely	0.4	(0.1)	0.7	(0.1)	0.8	(0.1)
Probably	4.4	(0.5)	6.5	(0.6)	7.7	(0.6)
Total Positive	4.8	(0.5)	7.2	(0.6)	8.5	(0.6)
Probably Not	19.7	(1.1)	20.7	(1.2)	20.7	(1.2)
Definitely Not	75.5	(1.2)	72.0	(1.2)	70.7	(1.3)
Don't Know/Refused	0.0	(**)	0.1	(0.1)	0.0	(**)
Total Negative	95.2	(0.5)	92.8	(0.6)	91.5	(0.6)
<u>Older Females<sup>b</sup></u>						
Definitely	0.2	(0.1)	0.1	(0.1)	0.3	(0.1)
Probably	1.9	(0.5)	3.2	(0.6)	3.4	(0.6)
Total Positive	2.2	(0.5)	3.3	(0.6)	3.7	(0.6)
Probably Not	14.1	(1.8)	15.6	(1.8)	15.8	(1.8)
Definitely Not	83.7	(1.8)	81.0	(1.9)	80.4	(1.9)
Don't Know/Refused	0.1	(0.1)	0.1	(0.1)	0.1	(0.1)
Total Negative	97.8	(0.5)	96.7	(0.6)	96.3	(0.6)

Note: Tabled values are column percentages with standard errors in parentheses. Estimates are based on interviews with 5,642 young males, 1,103 older males, 3,448 young females and 1,078 older females. Total positive and total negative values may differ slightly from the sum of their respective components due to rounding error.

\*\* Informative standard error not available.

Source: Questions 505, 507.

Table C.3a. Males' Composite Active Propensity and Sociodemographic Characteristics

		Young Males			Older Males		
		Positive Propensity (n=1,874)	Negative Propensity (n=3,168)	Total (n=5,042)	Positive Propensity (n=172)	Negative Propensity (n=931)	Total <sup>1</sup> (n=1,103)
<u>Age<sup>a</sup></u>							
16	(22)	34.5 (1.4)	21.4 (0.9)	25.7 (0.8)	38.5 (4.3)	32.8 (1.7)	33.7 (1.6)
17	(23)	29.8 (1.3)	24.4 (0.9)	26.1 (0.8)	36.4 (4.2)	34.5 (1.8)	34.8 (1.7)
18	(24)	15.7 (1.1)	18.7 (0.8)	17.3 (0.7)	25.1 (3.9)	32.7 (1.8)	31.5 (1.6)
19		9.4 (0.9)	14.9 (0.7)	13.1 (0.6)			
20		6.7 (1.0)	10.5 (0.6)	9.2 (0.5)			
21		3.9 (0.5)	10.1 (0.6)	8.1 (0.6)			
<u>Race/Ethnicity</u>							
White		64.2 (1.5)	82.3 (0.8)	76.4 (0.8)	62.3 (4.4)	84.8 (1.3)	81.2 (1.3)
Black		17.4 (1.2)	7.8 (0.6)	10.9 (0.6)	16.7 (3.2)	7.5 (0.9)	9.1 (1.0)
Hispanic		13.0 (1.0)	6.9 (0.5)	8.9 (0.5)	18.9 (3.8)	5.8 (0.8)	7.9 (1.0)
Other		5.5 (1.1)	3.0 (0.4)	3.8 (0.4)	2.1 (1.0)	1.8 (0.5)	1.9 (0.5)
<u>Marital Status</u>							
Never married		98.3 (0.3)	96.6 (0.4)	97.1 (0.3)	70.7 (4.2)	64.4 (1.8)	65.4 (1.6)
Currently married		1.4 (0.3)	2.9 (0.3)	2.4 (0.2)	25.8 (3.9)	31.3 (1.7)	30.4 (1.6)
Other <sup>b</sup>		0.3 (0.1)	0.5 (0.1)	0.4 (0.1)	3.6 (2.2)	4.2 (0.7)	4.1 (0.7)
<u>Educational Plans/Status<sup>c</sup></u>							
Attend school		74.0 (1.4)	67.6 (1.0)	69.6 (0.8)	15.1 (3.1)	15.8 (1.3)	15.7 (1.2)
Not attend school		25.0 (1.4)	31.2 (1.0)	29.2 (0.8)	82.4 (3.3)	83.3 (1.4)	83.2 (1.3)
Don't Know		1.0 (0.3)	1.3 (0.5)	1.2 (0.3)	2.5 (1.5)	0.9 (0.3)	1.1 (0.4)
<u>Years of Education Completed</u>							
Less than 10		14.7 (1.0)	6.7 (0.6)	9.3 (0.5)	10.1 (3.1)	4.5 (0.8)	5.5 (0.8)
10		32.0 (1.4)	21.8 (0.9)	25.1 (0.8)	5.7 (2.0)	3.7 (0.7)	4.0 (0.7)
11		31.8 (1.4)	27.0 (0.9)	28.6 (0.8)	12.8 (2.9)	7.1 (1.0)	8.1 (0.9)
12		18.1 (1.3)	32.2 (1.0)	27.6 (0.8)	62.2 (4.4)	65.7 (1.8)	65.1 (1.7)
Some vocational school		0.4 (0.2)	0.8 (0.2)	0.7 (0.1)	1.6 (0.9)	2.7 (0.6)	2.5 (0.5)
Some college		2.9 (0.5)	11.4 (0.7)	8.7 (0.5)	7.7 (2.2)	16.2 (1.4)	14.8 (1.2)
<u>Employment Status</u>							
Employed full time		21.1 (1.3)	32.1 (1.0)	28.5 (0.8)	72.3 (4.1)	81.8 (1.5)	80.3 (1.4)
Employed part time		33.3 (1.4)	31.6 (1.0)	32.2 (0.8)	15.0 (3.3)	6.5 (1.0)	7.9 (1.0)
Unemployed, looking		28.6 (1.3)	16.0 (0.8)	20.1 (0.7)	11.2 (3.0)	8.2 (1.0)	8.7 (1.0)
Unemployed, not looking		17.0 (1.1)	20.2 (1.0)	19.2 (0.8)	1.5 (0.9)	3.4 (0.7)	3.1 (0.6)

Note: Tabled values are column percentages with standard errors in parentheses.

<sup>a</sup>Ages 22-24 apply to older males.

<sup>b</sup>"Other" includes widowed, divorced, and separated.

<sup>c</sup>Data were collected during August, September, October and November 1987. Questions prior to October 1 asked about planned status for October. Questions after October 1 asked about actual status.

Source: Questions 403, 404, 407, 416, 417, 510-513, 713C, 714, 715.

Table C.3b. Females' Composite Active Propensity and Sociodemographic Characteristics

	Young Females			Older Females		
	Positive Propensity (n=476)	Negative Propensity (n=2,972)	Total (n=3,448)	Positive Propensity (n=53)	Negative Propensity (n=1,025)	Total (n=1,078)
<b>Age<sup>a</sup></b>						
16 (22)	40.2 (3.0)	24.4 (1.2)	26.7 (1.3)	40.6 (7.2)	32.3 (2.0)	32.7 (1.9)
17 (23)	24.8 (3.2)	22.2 (1.1)	20.6 (1.1)	35.4 (7.6)	34.0 (2.0)	34.1 (2.0)
18 (24)	13.5 (2.3)	15.3 (0.8)	15.1 (0.8)	24.0 (5.9)	33.7 (2.2)	33.3 (2.2)
19	9.0 (2.1)	15.5 (1.0)	14.6 (0.9)			
20	6.2 (1.2)	11.0 (0.9)	10.3 (0.8)			
21	6.2 (1.9)	11.5 (1.0)	10.7 (0.9)			
<b>Race/Ethnicity</b>						
White	57.0 (4.0)	79.3 (1.1)	76.0 (1.1)	48.3 (7.6)	79.9 (2.2)	78.4 (2.1)
Black	24.1 (3.0)	8.9 (0.7)	11.2 (0.8)	38.4 (7.6)	8.3 (1.0)	9.7 (1.1)
Hispanic	16.4 (3.0)	9.4 (0.9)	10.5 (0.9)	11.9 (4.7)	9.7 (1.7)	9.8 (1.6)
Other	2.5 (0.7)	2.3 (0.3)	2.4 (0.3)	1.5 (1.5)	2.1 (1.4)	2.0 (1.4)
<b>Marital Status</b>						
Never married	91.9 (3.7)	87.2 (1.0)	87.9 (1.0)	56.6 (7.5)	36.0 (2.0)	37.0 (2.0)
Currently married	5.0 (3.4)	11.3 (0.9)	10.3 (0.9)	29.2 (6.8)	52.8 (2.2)	51.7 (2.1)
Other <sup>b</sup>	3.1 (1.7)	1.6 (0.3)	1.8 (0.4)	14.2 (6.2)	11.2 (1.6)	11.3 (1.5)
<b>Educational Plans/Status<sup>c</sup></b>						
Attend school	73.7 (3.7)	62.9 (1.4)	64.5 (1.3)	21.4 (6.2)	12.5 (1.3)	12.9 (1.3)
Not attend school	25.1 (3.7)	36.7 (1.4)	35.0 (1.3)	78.6 (6.2)	86.8 (1.4)	86.4 (1.3)
Don't Know	1.2 (0.5)	0.4 (0.1)	0.5 (0.1)	0.0 ( **)	0.7 (0.4)	0.7 (0.3)
<b>Years of Education Completed</b>						
Less than 10	16.3 (3.7)	4.4 (0.4)	6.2 (0.7)	0.0 ( **)	5.0 (1.0)	4.8 (1.0)
10	30.0 (4.3)	22.5 (1.2)	23.7 (1.2)	0.0 ( **)	4.0 (0.7)	3.8 (0.6)
11	31.1 (3.6)	26.3 (1.2)	27.0 (1.2)	13.3 (5.2)	6.1 (0.9)	6.4 (0.9)
12	18.5 (2.2)	34.4 (1.3)	32.0 (1.2)	61.6 (7.6)	60.0 (2.4)	60.3 (2.3)
Some vocational school	0.6 (0.3)	0.8 (0.2)	0.8 (0.2)	1.7 (1.7)	3.7 (0.7)	3.6 (0.7)
Some college	3.5 (0.9)	11.6 (0.9)	10.4 (0.8)	23.4 (6.5)	21.0 (2.4)	21.1 (2.3)
<b>Employment Status</b>						
Employed full time	14.1 (1.9)	23.8 (1.3)	22.4 (1.1)	42.2 (7.5)	49.8 (2.2)	49.4 (2.1)
Employed part time	28.5 (3.3)	34.0 (1.3)	33.2 (1.2)	20.9 (6.2)	15.1 (1.6)	15.4 (1.5)
Unemployed, looking	32.8 (4.1)	19.5 (1.1)	21.5 (1.1)	21.9 (6.4)	9.2 (1.0)	9.8 (1.0)
Unemployed, not looking	24.7 (4.3)	22.7 (1.1)	23.0 (1.2)	15.1 (5.4)	25.9 (2.1)	25.4 (2.1)

Note: Tabled values are column percentages with standard errors in parentheses.

<sup>a</sup>Ages 22-24 apply to older females.

<sup>b</sup>"Other" includes widowed, divorced, and separated.

<sup>c</sup>Data were not collected during August, September, October and November 1987. Questions prior to October 1 asked about planned status for October. Questions after October 1 asked about actual status.

\*\*Informative standard error not available.

Source: Questions 403, 404, 407, 416, 417, 510-513, 713C, 714, 715.

Table C.4a. Males' Composite Reserve Propensity and Sociodemographic Characteristics

	Young Males			Older Males		
	Positive Propensity (n = 1,221)	Negative Propensity (n = 4,421)	Total (n = 5,642)	Positive Propensity (n = 154)	Negative Propensity (n = 949)	Total (n = 1,103)
<b>Age<sup>a</sup></b>						
16 (22)	31.0 (1.7)	24.2 (0.9)	25.7 (0.8)	34.4 (4.4)	33.6 (1.7)	33.7 (1.6)
17 (23)	28.9 (1.7)	25.4 (0.9)	26.1 (0.8)	34.6 (4.4)	34.8 (1.8)	34.8 (1.7)
18 (24)	17.2 (1.5)	17.9 (0.8)	17.7 (0.7)	31.0 (4.4)	31.5 (1.7)	31.5 (1.6)
19	9.5 (1.0)	14.1 (0.7)	13.1 (0.6)			
20	8.4 (1.4)	9.5 (0.5)	9.2 (0.5)			
21	5.0 (0.7)	8.9 (0.5)	8.1 (0.5)			
<b>Race/Ethnicity</b>						
White	61.7 (2.0)	80.4 (0.8)	76.4 (0.8)	64.2 (4.5)	33.9 (1.4)	81.2 (1.3)
Black	19.8 (1.5)	8.5 (0.6)	10.9 (0.6)	19.8 (3.6)	7.3 (0.9)	9.0 (1.0)
Hispanic	12.4 (1.1)	8.0 (0.5)	8.9 (0.5)	14.3 (3.3)	6.9 (1.0)	7.9 (1.0)
Other	6.1 (1.6)	3.2 (0.4)	3.8 (0.4)	1.7 (1.0)	1.9 (0.5)	1.9 (0.5)
<b>Marital Status</b>						
Never married	98.5 (0.3)	96.8 (0.3)	97.1 (0.3)	67.0 (4.7)	65.2 (1.8)	65.4 (1.6)
Currently married	1.3 (0.3)	2.7 (0.3)	2.4 (0.2)	30.0 (4.5)	30.4 (1.7)	30.4 (1.6)
Other <sup>b</sup>	2.3 (0.1)	0.5 (0.1)	0.4 (0.1)	3.0 (2.4)	4.3 (0.7)	4.1 (0.7)
<b>Educational Plans/Status<sup>c</sup></b>						
Attend school	70.5 (1.8)	69.4 (0.9)	69.6 (0.8)	14.8 (3.3)	15.9 (1.3)	15.7 (1.2)
Not attend school	28.5 (1.8)	29.4 (0.9)	29.2 (0.8)	81.5 (3.6)	83.4 (1.4)	83.2 (1.3)
Don't know	1.1 (0.4)	1.2 (0.4)	1.2 (0.3)	3.6 (1.8)	0.7 (0.3)	1.1 (0.4)
<b>Years of Education Completed</b>						
Less than 10	13.6 (1.3)	8.1 (0.6)	9.3 (0.5)	10.5 (3.3)	4.6 (0.8)	5.5 (0.8)
10	29.7 (1.7)	23.9 (0.9)	25.1 (0.8)	4.6 (1.9)	3.9 (0.7)	4.0 (0.7)
11	31.5 (1.8)	27.8 (0.9)	28.6 (0.8)	12.8 (3.0)	7.3 (1.0)	8.1 (0.9)
12	22.0 (1.8)	29.1 (0.9)	27.6 (0.8)	64.2 (4.6)	65.2 (1.8)	65.1 (1.7)
Vocational school	0.6 (0.2)	0.7 (0.2)	0.7 (0.1)	2.1 (1.2)	2.6 (0.6)	2.5 (0.5)
Some college	2.5 (0.5)	10.3 (0.6)	8.7 (0.5)	5.9 (2.2)	16.3 (1.4)	14.8 (1.2)
<b>Employment Status</b>						
Employed full time	24.7 (1.7)	29.6 (0.9)	28.5 (0.8)	69.5 (4.4)	82.0 (1.5)	80.3 (1.4)
Employed part time	30.0 (1.7)	32.7 (0.9)	32.2 (0.8)	11.9 (2.9)	7.3 (1.1)	7.9 (1.0)
Unemployed, looking	28.8 (1.7)	17.8 (0.7)	20.1 (0.7)	16.6 (3.8)	7.4 (1.0)	8.7 (1.0)
Unemployed, not looking	16.5 (1.6)	19.9 (0.9)	19.2 (0.8)	2.1 (1.2)	3.3 (0.6)	3.1 (0.6)

Note: Tabled values are column percentages with standard errors in parentheses.

<sup>a</sup>Ages 22-24 apply to older males.

<sup>b</sup>"Other" includes widowed, divorced, and separated.

<sup>c</sup>Interviews completed before October 1, 1987 asked about plans; interviews completed after October 1 asked about current status.

Source: Questions 403, 404, 407, 416, 417, 505, 507, 713C, 714, 715.

Table C.4b. Females' Composite Reserve Propensity and Sociodemographic Characteristics

	Young Females			Older Females		
	Positive Propensity (n = 303)	Negative Propensity (n = 3,145)	Total (n = 3,448)	Positive Propensity (n = 43)	Negative Propensity (n = 1,035)	Total (n = 1,078)
<u>Age<sup>a</sup></u>						
16 (22)	34.5 (3.5)	26.0 (1.3)	26.7 (1.3)	30.5 (7.7)	32.7 (2.0)	32.7 (1.9)
17 (23)	21.8 (2.7)	22.7 (1.1)	22.6 (1.1)	41.5 (8.5)	33.8 (2.0)	34.1 (2.0)
18 (24)	16.1 (3.2)	15.0 (0.8)	15.1 (0.8)	28.0 (9.1)	33.5 (2.2)	33.3 (2.2)
19	11.5 (2.9)	14.8 (1.0)	14.6 (0.9)			
20	9.3 (1.9)	10.4 (0.8)	10.3 (0.8)			
21	6.8 (1.5)	11.1 (1.0)	10.7 (0.9)			
<u>Race/Ethnicity</u>						
White	43.3 (3.7)	78.8 (1.1)	76.0 (1.1)	51.8 (8.5)	79.5 (2.2)	78.4 (2.1)
Black	31.8 (3.1)	9.2 (0.8)	11.2 (0.8)	33.3 (8.4)	8.8 (1.0)	9.7 (1.1)
Hispanic	20.8 (4.0)	9.5 (0.9)	10.5 (0.9)	13.0 (5.6)	9.7 (1.6)	9.8 (1.6)
Other	2.2 (0.8)	2.4 (0.3)	2.4 (0.3)	1.9 (1.9)	2.1 (1.4)	2.0 (1.4)
<u>Marital Status</u>						
Never married	95.1 (2.1)	87.2 (1.1)	87.9 (1.0)	52.5 (8.4)	36.4 (2.0)	37.0 (2.0)
Currently married	2.8 (1.3)	11.0 (1.0)	10.3 (0.9)	31.2 (7.7)	52.5 (2.2)	51.7 (2.1)
Other <sup>b</sup>	2.1 (1.6)	1.8 (0.4)	1.8 (0.4)	16.4 (7.5)	11.1 (1.5)	11.3 (1.5)
<u>Educational Plans/Status<sup>c</sup></u>						
Attend school	72.6 (3.2)	63.8 (1.4)	64.5 (1.3)	14.8 (5.9)	12.8 (1.3)	12.9 (1.3)
Not attend school	26.4 (3.1)	35.8 (1.4)	35.0 (1.3)	85.2 (5.9)	86.4 (1.4)	86.4 (1.3)
Don't know	1.0 (0.6)	0.4 (1.2)	0.5 (0.1)	0.0 ( **)	0.7 (0.4)	0.7 (0.3)
<u>Years of Education Completed</u>						
Less than 10	15.3 (2.6)	5.3 (0.7)	6.2 (0.7)	0.0 ( **)	5.0 (1.0)	4.8 (1.0)
10	28.8 (3.7)	23.2 (1.3)	23.7 (1.2)	0.0 ( **)	3.9 (0.7)	3.8 (0.6)
11	26.8 (3.0)	27.0 (1.2)	27.0 (1.2)	10.7 (5.2)	6.3 (0.9)	6.4 (0.9)
12	17.7 (2.4)	33.3 (1.3)	32.0 (1.2)	68.3 (7.7)	60.0 (2.3)	60.3 (2.3)
Vocational school	0.6 (0.4)	0.8 (0.2)	0.8 (0.2)	3.1 (3.0)	3.6 (0.7)	3.6 (0.7)
Some college	10.8 (2.6)	10.4 (0.9)	10.4 (0.8)	17.9 (6.0)	21.2 (2.4)	21.1 (2.3)
<u>Employment Status</u>						
Employed full time	14.9 (2.5)	23.0 (1.2)	22.4 (1.1)	41.5 (8.3)	49.8 (2.2)	49.4 (2.1)
Employed part time	29.9 (3.2)	33.5 (1.3)	33.2 (1.2)	21.9 (6.5)	15.1 (1.6)	15.4 (1.5)
Unemployed, looking	35.3 (3.4)	20.2 (1.2)	21.5 (1.1)	22.4 (7.2)	9.3 (1.0)	9.8 (1.0)
Unemployed, not looking	19.9 (3.7)	23.2 (1.2)	23.0 (1.2)	14.2 (6.1)	25.8 (2.1)	25.4 (2.1)

Note: Tabled values are column percentages with standard errors in parentheses.

<sup>a</sup>Ages 22-24 apply to older females.

<sup>b</sup>"Other" includes widowed, divorced, and separated.

<sup>c</sup>Interviews completed before October 1, 1987 asked about plans; Interviews completed after October 1 asked about current status.

\*\*Informative standard error not available.

Source: Questions 403, 404, 407, 416, 417, 505, 507, 713C, 714, 715.

Table C.5a. Influences on Serving in the Active Military for Males

Market/Item Response	Positive Propensity	Negative Propensity	Total
<u>Young Males</u>			
Feelings of Those Who Matter Most			
Favorable	64.3	30.7	41.6 (0.9)
Neither favorable nor unfavorable	17.0	29.5	25.5 (0.8)
Unfavorable	18.7	39.8	32.9 (0.8)
Personal Feelings			
Favorable	78.1	22.8	40.8 (0.9)
Neither favorable nor unfavorable	11.3	19.1	16.6 (0.6)
Unfavorable	10.6	58.1	42.7 (0.9)
Advice to Friend About Seeing Recruiter			
Waste of time	2.5	10.5	7.9 (0.5)
Up to him/her	38.9	64.3	56.1 (0.9)
A good idea	58.6	25.2	36.1 (0.9)
<u>Older Males</u>			
Feelings of Those Who Matter Most			
Favorable	60.6	30.8	35.6 (1.6)
Neither favorable nor unfavorable	12.7	33.2	29.8 (1.6)
Unfavorable	26.7	36.0	34.5 (1.6)
Personal Feelings			
Favorable	68.2	23.6	30.7 (1.6)
Neither favorable nor unfavorable	10.6	17.6	16.5 (1.2)
Unfavorable	21.3	58.9	52.9 (1.7)
Advice to Friend About Seeing Recruiter			
Waste of time	6.4	11.5	10.7 (1.1)
Up to him/her	41.9	59.6	56.7 (1.7)
A good idea	51.7	28.9	32.6 (1.6)

Note: Tabled values are column percentages with standard errors in parentheses. Estimates are based on interviews with 5,607 young males (1,861 with positive propensity and 3,746 with negative propensity) and 1,098 older males (170 with positive propensity and 928 with negative propensity).

Source: Questions 510-513, 690, 691, 692.

Table C.5b. Influences on Serving in the Active Military for Females

Market/Item Response	Positive Propensity	Negative Propensity	Total
<u>Young Females</u>			
Feelings of Those Who Matter Most			
Favorable	54.0	25.1	29.5 (1.2)
Neither favorable nor unfavorable	21.2	31.8	30.2 (1.3)
Unfavorable	24.8	43.0	40.3 (1.3)
Personal Feelings			
Favorable	73.6	16.4	25.0 (1.2)
Neither favorable nor unfavorable	15.8	16.9	16.8 (1.1)
Unfavorable	10.6	66.7	58.3 (1.3)
Advice to Friend About Seeing Recruiter			
Waste of time	1.0	7.5	6.5 (0.7)
Up to him/her	39.9	64.8	61.0 (1.3)
A good idea	59.1	27.7	32.5 (1.2)
<u>Older Females</u>			
Feelings of Those Who Matter Most			
Favorable	53.6	22.7	24.1 (1.9)
Neither favorable nor unfavorable	20.6	24.0	23.8 (1.7)
Unfavorable	25.9	53.4	52.1 (2.2)
Personal Feelings			
Favorable	83.8	18.0	21.1 (1.7)
Neither favorable nor unfavorable	1.3	12.2	11.7 (1.1)
Unfavorable	14.9	69.9	67.3 (1.9)
Advice to Friend About Seeing Recruiter			
Waste of time	2.3	5.8	5.7 (0.8)
Up to him/her	30.2	64.1	62.4 (2.0)
A good idea	67.6	30.1	31.9 (1.9)

Note: Tabled values are column percentages with standard errors in parentheses. Estimates are based on interviews with 3,431 young females (473 with positive propensity and 2,958 with negative propensity) and 1,070 older females (53 with positive propensity and 1,017 with negative propensity).

Source: Questions 510-513, 690, 691, 692.



Table C.6. Knowledge About Military Educational Benefits

Market/Item Response	Positive Propensity	Negative Propensity	Total
<u>Young Males</u>			
Yes, Service pays benefits	66.3	62.9	64.0 (0.8)
Services said to offer educational benefits <sup>a</sup>			
Army	50.2	50.0	50.1 (0.9)
Navy	29.5	29.3	29.3 (0.8)
Marine Corps	25.0	26.2	25.8 (0.8)
Air Force	33.3	31.0	31.8 (0.8)
Don't know	4.7	5.9	5.5 (0.5)
No, Service does not pay educational benefits	26.5	29.9	28.8 (0.8)
Don't know	7.2	7.2	7.2 (0.5)
<u>Older Males</u>			
Yes, Service pays benefits	58.7	61.9	61.4 (1.7)
Services said to offer educational benefits <sup>a</sup>			
Army	48.1	48.4	48.4 (1.7)
Navy	25.4	34.0	32.7 (1.6)
Marine Corps	29.6	30.6	30.4 (1.5)
Air Force	35.4	37.0	36.7 (1.6)
Don't know	4.6	5.9	5.7 (0.9)
No, Service does not pay educational benefits	30.7	30.7	30.7 (1.6)
Don't know	10.6	7.4	7.9 (1.0)
<u>Young Females</u>			
Yes, Service pays benefits	51.5	51.6	51.6 (1.3)
Services said to offer educational benefits <sup>a</sup>			
Army	34.5	36.7	36.3 (1.2)
Navy	17.1	21.6	20.9 (1.1)
Marine Corps	13.2	17.7	17.0 (1.0)
Air Force	20.5	21.7	21.6 (1.0)
Don't know	6.1	7.8	7.5 (0.7)
No, Service does not pay educational benefits	34.1	38.0	37.4 (1.3)
Don't know	14.4	10.4	11.0 (0.8)
<u>Older Females</u>			
Yes, Service pays benefits	54.9	48.0	48.3 (2.2)
Services said to offer educational benefits <sup>a</sup>			
Army	35.9	35.1	35.1 (2.1)
Navy	25.9	24.6	24.6 (2.1)
Marine Corps	18.3	19.8	19.8 (2.0)
Air Force	28.4	23.4	23.7 (1.9)
Don't know	5.9	5.5	5.5 (1.1)
No, Service does not pay educational benefits	34.0	39.2	39.0 (2.0)
Don't know	11.1	12.8	12.7 (1.6)

Note: Tabled values are column percentages with standard errors in parentheses. Estimates are based on interviews with 5,642 young males (1,874 with positive propensity and 3,768 with negative propensity), 1,103 older males (172 with positive propensity and 931 with negative propensity), 3,448 young females (476 with positive propensity and 2,972 with negative propensity) and 1,078 older females (53 with positive propensity and 1,025 with negative propensity).

<sup>a</sup>Percentages for individual Services may not total 100 percent "Yes" because respondents were allowed to mention more than one Service.

Source: Questions 510-513, 559-560.

Table C.7a. Males' Knowledge of Pay and Time Required to Participate in the Reserve Component

	Young Males			Older Males		
	Positive Reserve Propensity (n=619)	Negative Reserve Propensity (n=2,217)	Total (n=2,836)	Positive Reserve Propensity (n=154)	Negative Reserve Propensity (n=948)	Total (n=1,102)
<u>Days/Month Required for Training</u>						
1	1.6 (0.6)	2.6 (0.4)	2.4 (0.3)	3.3 (1.7)	2.8 (0.6)	2.9 (0.6)
2 <sup>a</sup>	32.7 (2.4)	34.4 (1.3)	34.0 (1.2)	47.8 (4.6)	48.2 (1.8)	48.2 (1.7)
3-4	18.9 (1.8)	16.3 (1.0)	16.9 (0.9)	15.0 (3.6)	17.3 (1.4)	17.0 (1.3)
5-7	14.5 (1.9)	13.5 (0.9)	13.7 (0.8)	10.4 (2.8)	8.2 (1.0)	8.5 (0.9)
8 or more	28.8 (2.2)	29.1 (1.3)	29.0 (1.1)	18.4 (3.6)	18.6 (1.5)	18.5 (1.4)
Don't know	3.5 (0.8)	4.2 (0.6)	4.1 (0.5)	5.1 (2.4)	4.9 (0.7)	4.9 (0.7)
<u>Days/Year for Active Duty</u>						
1-6	6.7 (1.1)	6.1 (0.6)	6.2 (0.6)	7.3 (2.3)	6.1 (0.9)	6.3 (0.8)
7-13	12.6 (1.8)	11.6 (0.9)	11.8 (0.8)	10.6 (2.9)	11.7 (1.2)	11.6 (1.1)
14 <sup>a</sup>	26.4 (2.2)	27.0 (1.2)	26.9 (1.0)	34.1 (4.4)	39.8 (1.8)	39.0 (1.7)
15-29	11.2 (1.8)	12.6 (0.9)	12.3 (0.8)	9.0 (2.8)	9.7 (1.1)	9.6 (1.0)
30	9.3 (1.5)	10.8 (0.8)	10.5 (0.7)	13.3 (3.5)	9.1 (1.2)	9.7 (1.1)
31-90	28.8 (2.2)	26.7 (1.3)	27.1 (1.1)	19.5 (3.6)	18.2 (1.5)	18.4 (1.4)
Don't know	5.0 (1.1)	5.2 (0.6)	5.1 (0.5)	6.1 (2.5)	5.3 (0.8)	5.5 (0.8)
<u>Beginning Pay for 8-hour Training Day</u>						
\$5-29	10.8 (1.6)	8.0 (0.6)	8.6 (0.6)	8.2 (2.8)	9.7 (1.1)	9.5 (1.0)
30-39 <sup>a</sup>	8.1 (1.5)	8.0 (0.7)	8.0 (0.6)	7.4 (2.2)	8.5 (1.1)	8.3 (1.0)
40-49 <sup>a</sup>	14.6 (2.1)	14.7 (1.0)	14.7 (0.9)	16.4 (3.3)	12.9 (1.2)	13.4 (1.1)
50-59	12.3 (1.6)	18.8 (1.1)	17.4 (0.9)	15.0 (3.1)	19.0 (1.5)	18.5 (1.3)
60-99	16.6 (1.8)	14.8 (0.9)	15.1 (0.8)	19.3 (3.5)	19.9 (1.4)	19.9 (1.3)
100 or more	27.8 (2.2)	23.3 (1.2)	24.3 (1.1)	16.7 (3.5)	17.4 (1.4)	17.3 (1.3)
Don't know	9.8 (1.3)	12.5 (0.9)	11.9 (0.8)	17.1 (4.1)	12.7 (1.2)	13.3 (1.2)

Note: Tabled values are column percentages with standard errors in parentheses.

<sup>a</sup>Correct response. Initial pay for paygrade E-1 in FY 87 was \$40.56 for one day of training.

Source: Questions 505, 507, 571, 572, 573.

Table C.7b. Females' Knowledge of Pay and Time Required to Participate In the Reserve Component

	Young Females			Older Females		
	Positive Reserve Propensity (n=303)	Negative Reserve Propensity (n=3,142)	Total (n=3,445)	Positive Reserve Propensity (n=3,445)	Negative Reserve Propensity (n=1,034)	Total (n=1,077)
<u>Days/Month Required for Training</u>						
1	1.5 (0.7)	1.9 (0.3)	1.9 (0.3)	0.0 ( **)	2.2 (0.5)	2.1 (0.4)
2 <sup>a</sup>	25.7 (3.3)	24.3 (1.2)	24.4 (1.1)	30.5 (7.6)	37.3 (2.2)	37.0 (2.1)
3-4	15.7 (2.6)	17.1 (1.0)	17.0 (1.0)	29.6 (7.5)	20.2 (2.0)	20.6 (1.9)
5-7	13.3 (2.1)	13.2 (0.8)	13.2 (0.7)	17.4 (6.6)	10.7 (1.0)	10.9 (1.0)
8 or more	38.9 (3.7)	38.7 (1.4)	38.7 (1.3)	20.4 (7.3)	25.4 (2.0)	25.2 (1.9)
Don't know	5.0 (1.4)	4.8 (0.6)	4.8 (0.6)	2.2 (2.1)	4.2 (0.7)	4.2 (0.7)
<u>Days/Year for Active Duty</u>						
1-6	10.3 (1.8)	6.7 (0.5)	7.0 (0.5)	4.3 (3.0)	8.4 (1.2)	8.2 (1.2)
7-13	11.4 (2.2)	10.5 (0.7)	10.5 (0.7)	23.7 (7.3)	13.2 (1.3)	13.6 (1.2)
14 <sup>a</sup>	20.8 (2.8)	21.4 (1.1)	21.3 (1.0)	25.3 (6.8)	29.2 (2.0)	29.0 (2.0)
15-29	9.8 (1.9)	11.5 (0.9)	11.3 (0.9)	4.0 (3.9)	10.3 (1.8)	10.0 (1.7)
30	13.2 (2.7)	11.1 (0.9)	11.3 (0.8)	15.6 (6.9)	11.9 (1.7)	12.0 (1.7)
31-90	28.6 (3.7)	33.1 (1.4)	32.7 (1.3)	24.9 (7.1)	20.9 (1.6)	21.0 (1.6)
Don't know	6.0 (1.4)	5.8 (0.7)	5.8 (0.7)	2.1 (2.1)	6.2 (0.9)	6.1 (0.8)
<u>Beginning Pay for 8-hour Training Day</u>						
\$5-29	13.0 (2.5)	10.3 (0.8)	10.6 (0.8)	17.4 (6.7)	9.2 (1.0)	9.5 (1.0)
30-39 <sup>a</sup>	6.9 (2.0)	7.7 (0.8)	7.6 (0.7)	17.8 (7.5)	6.4 (1.0)	6.9 (1.0)
40-49 <sup>a</sup>	11.6 (2.1)	12.1 (0.8)	11.9 (0.8)	7.6 (4.4)	12.9 (1.4)	12.7 (1.4)
50-59	16.0 (2.9)	17.2 (1.1)	17.1 (1.0)	5.5 (3.2)	19.2 (1.9)	18.7 (1.8)
60-99	12.3 (3.1)	13.6 (1.1)	13.5 (1.0)	17.3 (5.9)	16.3 (1.5)	16.3 (1.5)
100 or more	28.6 (3.2)	24.6 (1.1)	24.9 (1.1)	20.3 (6.4)	21.4 (1.8)	21.4 (1.7)
Don't know	12.7 (2.1)	14.6 (1.1)	14.5 (1.0)	14.1 (5.7)	14.6 (1.8)	15.6 (1.7)

Note: Tabled values are column percentages with standard errors in parentheses.

<sup>a</sup>Correct response. Initial pay for paygrade E-1 in FY 87 was \$40.56 for one day of training.

\*\*Informative standard error not available.

Source: Questions 505, 507, 571, 572, 573.

Table C.8a. Males' Levels of Awareness of Military Advertising

Sponsor/Awareness	Young Males			Older Males		
	Positive Propensity (n=1,872)	Negative Propensity (n=3,766)	Total (n=5,638)	Positive Propensity (n=172)	Negative Propensity (n=931)	Total (n=1,103)
<b>Army</b>						
Unaided awareness	72.3	72.9	72.7 (0.8)	64.2	70.3	69.8 (1.6)
Aided awareness	15.9	15.8	15.8 (0.6)	20.0	16.7	17.2 (1.3)
Aided or unaided	88.2	88.6	88.5 (0.6)	84.2	87.0	86.5 (1.2)
<b>Navy</b>						
Unaided awareness	43.9	49.9	47.9 (0.9)	42.4	44.3	44.0 (1.7)
Aided awareness	25.2	19.9	21.6 (0.7)	21.8	23.0	22.8 (1.5)
Aided or unaided	69.1	69.7	69.5 (0.8)	64.2	67.3	66.8 (1.6)
<b>Marine Corps</b>						
Unaided awareness	52.3	56.6	55.2 (0.9)	51.4	53.1	52.9 (1.7)
Aided awareness	22.8	21.4	21.9 (0.7)	22.9	22.6	22.6 (1.5)
Aided or unaided	75.2	78.1	77.1 (0.8)	74.4	75.7	75.5 (1.5)
<b>Air Force</b>						
Unaided awareness	56.9	56.2	56.4 (0.9)	53.6	52.4	52.6 (1.7)
Aided awareness	21.7	23.0	22.6 (0.7)	22.4	24.8	24.4 (1.5)
Aided or unaided	78.6	79.2	79.0 (0.7)	76.0	77.1	77.0 (1.5)
<b>Coast Guard</b>						
Unaided awareness	18.8	21.6	20.7 (0.7)	16.8	17.7	17.6 (1.3)
Aided awareness	20.8	17.9	18.8 (0.7)	27.4	19.5	20.8 (1.4)
Aided or unaided	39.6	39.4	39.5 (0.9)	44.2	37.2	38.3 (1.7)
<b>National Guard/Reserve<sup>a</sup></b>						
Unaided awareness	18.7	22.0	21.3 (0.7)	24.3	21.2	12.2 (1.1)
Aided awareness	36.5	33.2	33.9 (0.8)	40.3	34.4	34.2 (1.6)
Aided or unaided	55.2	55.2	55.2 (0.9)	64.6	55.6	46.4 (1.7)
<b>Joint Services<sup>b</sup></b>						
Unaided awareness	11.9	12.4	12.2 (0.6)	9.3	12.8	21.6 (1.3)
Aided awareness	38.2	37.9	38.0 (0.9)	36.5	33.7	35.2 (1.7)
Aided or unaided	50.0	50.3	50.2 (0.9)	45.9	46.5	56.9 (1.7)

Note: Tabled values are percentages with standard errors in parentheses. Aided awareness is somewhat inversely related to unaided awareness in that respondents are only asked about it if they do not report unaided awareness for a given Service.

<sup>a</sup>Propensity for this item refers to Composite Reserve Propensity.

<sup>b</sup>Question refers to "one ad for Joint Services."

Source: Questions 510-513, 601-608.

Table C.8b. Females' Levels of Awareness of Military Advertising

Sponsor/Awareness	Young Females			Older Females		
	Positive Propensity (n=475)	Negative Propensity (n=2,971)	Total (n=3,446)	Positive Propensity (n=53)	Negative Propensity (n=1,024)	Total (n=1,077)
<b>Army</b>						
Unaided awareness	67.3	70.8	70.3 (1.2)	71.5	67.0	67.2 (2.2)
Aided awareness	21.4	15.0	16.0 (1.1)	10.5	15.1	14.9 (1.7)
Aided or unaided	88.7	85.8	86.3 (0.9)	82.0	82.1	82.1 (1.8)
<b>Navy</b>						
Unaided awareness	40.8	44.9	44.3 (1.3)	32.4	45.1	44.5 (2.2)
Aided awareness	26.5	20.2	21.1 (1.2)	13.6	18.5	18.3 (1.9)
Aided or unaided	67.3	65.1	65.4 (1.2)	46.0	63.6	62.8 (1.9)
<b>Marine Corps</b>						
Unaided awareness	44.2	48.7	48.0 (1.3)	37.5	48.2	47.7 (2.1)
Aided awareness	21.7	21.5	21.5 (1.0)	17.2	20.8	20.6 (1.7)
Aided or unaided	65.9	70.2	69.6 (1.3)	54.7	69.0	68.3 (2.0)
<b>Air Force</b>						
Unaided awareness	45.1	49.9	49.1 (1.3)	56.9	46.6	47.1 (2.2)
Aided awareness	33.1	23.4	24.8 (1.2)	16.4	21.1	20.9 (1.6)
Aided or unaided	78.1	73.2	74.0 (1.2)	73.3	67.7	68.0 (2.0)
<b>Coast Guard</b>						
Unaided awareness	14.9	12.8	13.1 (0.8)	16.0	15.1	15.2 (1.8)
Aided awareness	19.1	16.7	17.0 (1.0)	17.8	16.4	16.5 (1.6)
Aided or unaided	34.0	29.4	30.1 (1.2)	33.8	31.6	31.7 (2.1)
<b>National Guard/Reserve<sup>a</sup></b>						
Unaided awareness	18.0	17.3	17.4 (0.9)	19.9	22.5	22.4 (1.8)
Aided awareness	35.8	26.9	27.6 (1.2)	28.7	25.0	25.2 (1.7)
Aided or unaided	53.9	44.2	45.0 (1.3)	48.6	47.6	47.6 (2.1)
<b>Joint Services<sup>b</sup></b>						
Unaided awareness	11.6	10.4	10.6 (0.9)	14.4	8.7	9.0 (1.0)
Aided awareness	26.1	29.8	29.3 (1.1)	28.7	25.7	28.5 (1.9)
Aided or unaided	37.7	40.2	39.8 (1.3)	43.0	34.4	34.8 (2.0)

Note: Tabled values are percentages with standard errors in parentheses. Aided awareness is somewhat inversely related to unaided awareness in that respondents are only asked about it if they do not report unaided awareness for a given Service.

<sup>a</sup>Propensity for this item refers to Composite Reserve Propensity.

<sup>b</sup>Question refers to "one ad for Joint Services."

Source: Questions 510-513, 601-608.

Table C.9a. Males' Recognition of Military Advertising Slogans

Slogan/Response	Young Males			Older Males		
	Positive Propensity (n=1,874)	Negative Propensity (n=3,767)	Total (n=5,641)	Positive Propensity (n=172)	Negative Propensity (n=931)	Total (n=1,103)
"Be all you can be."						
<u>Army</u>	84.1	82.0	82.7 (0.7)	72.1	75.1	74.6 (1.5)
Navy	2.9	4.2	3.8 (0.3)	5.8	5.1	5.2 (0.7)
Marine Corps	2.6	3.3	3.1 (0.3)	5.8	5.3	5.4 (0.8)
Air Force	4.1	3.5	3.7 (0.3)	5.8	5.2	5.3 (0.7)
Joint Services	3.7	4.0	3.9 (0.3)	6.2	3.9	4.2 (0.7)
Don't know	2.7	3.1	3.0 (0.3)	4.3	5.5	5.3 (0.8)
"_____. It's not just a job, it's an adventure."						
<u>Army</u>	33.9	36.5	35.6 (0.9)	29.2	35.2	34.2 (1.6)
<u>Navy</u>	32.5	30.5	31.1 (0.8)	33.3	33.3	33.3 (1.6)
Marine Corps	12.5	11.2	11.6 (0.6)	12.5	10.0	10.4 (1.1)
Air Force	8.7	8.2	8.3 (0.5)	12.4	10.8	11.0 (1.1)
Joint Services	6.0	6.5	6.3 (0.5)	7.0	4.2	4.7 (0.7)
Don't know	6.4	7.2	7.0 (0.4)	5.7	6.6	6.5 (0.9)
"The few, the proud, the _____."						
<u>Army</u>	4.7	4.1	4.3 (0.3)	9.5	3.3	4.3 (0.7)
Navy	4.7	4.0	4.2 (0.4)	1.7	3.1	2.9 (0.6)
<u>Marine Corps</u>	78.2	82.2	80.9 (0.7)	73.2	83.2	81.6 (1.3)
Air Force	3.7	2.8	3.1 (0.3)	3.3	2.9	3.0 (0.6)
Joint Services	2.5	1.4	1.8 (0.2)	4.4	1.2	1.8 (0.5)
Don't know	6.2	5.7	5.8 (0.4)	7.9	6.2	6.5 (0.9)
"Aim high. _____."						
<u>Army</u>	3.1	2.2	2.5 (0.3)	1.6	3.2	2.9 (0.5)
Navy	1.4	2.3	1.9 (0.3)	3.9	3.5	3.6 (0.6)
Marine Corps	1.8	1.2	1.4 (0.2)	2.9	2.9	2.9 (0.6)
<u>Air Force</u>	90.7	90.7	90.7 (0.5)	83.1	82.3	82.4 (1.3)
Joint Services	0.5	0.4	0.4 (0.1)	2.1	1.0	1.2 (0.4)
Don't know	2.9	3.2	3.1 (0.3)	6.5	7.1	7.0 (0.9)
"It's a great place to start."						
<u>Army</u>	40.5	40.5	40.5 (0.9)	42.3	40.8	41.0 (1.7)
Navy	16.1	13.2	14.1 (0.6)	16.3	18.3	18.0 (1.3)
Marine Corps	6.6	7.5	7.2 (0.5)	7.0	4.1	4.5 (0.7)
Air Force	13.1	10.3	11.2 (0.6)	13.8	12.1	12.3 (1.1)
<u>Joint Services</u>	12.2	16.4	15.1 (0.7)	10.5	12.0	11.7 (1.1)
Don't know	11.5	12.1	11.9 (0.6)	10.7	12.8	12.5 (1.2)
"We're looking for a few good men."						
<u>Army</u>	13.5	13.9	13.8 (0.6)	12.9	15.4	15.0 (1.2)
Navy	8.2	6.3	6.9 (0.4)	4.0	5.0	4.9 (0.7)
<u>Marine Corps</u>	66.3	67.9	67.3 (0.8)	64.9	68.1	67.5 (1.6)
Air Force	3.5	3.3	3.3 (0.3)	6.9	2.5	3.2 (0.6)
Joint Services	3.8	3.1	3.3 (0.4)	4.2	3.2	3.3 (0.6)
Don't know	4.7	5.6	5.3 (0.4)	7.0	5.8	6.0 (0.9)
"We're not a company—we're a country."						
<u>Army</u>	18.0	20.2	19.5 (0.7)	21.2	22.4	22.2 (1.4)
Navy	12.6	9.5	10.5 (0.5)	12.4	7.6	8.3 (1.0)
Marine Corps	10.5	8.7	9.3 (0.5)	9.2	7.8	8.0 (0.9)
Air Force	6.5	6.2	6.3 (0.4)	7.6	6.8	7.0 (0.8)
<u>Joint Services</u>	31.3	34.1	33.2 (0.9)	30.0	29.0	29.1 (1.6)
Don't know	21.1	21.4	21.3 (0.7)	19.6	26.5	25.4 (1.5)

Note: Tabled values are column percentages with standard errors in parentheses; correct responses for each slogan are underlined.

Source: Questions 510-513, 610-615.

Table C.9b. Females' Recognition of Military Advertising Slogans

Slogan/Response	Young Females			Older Females		
	Positive Propensity (n=476)	Negative Propensity (n=2,971)	Total (n=3,447)	Positive Propensity (n=53)	Negative Propensity (n=1,024)	Total (n=1,077)
"Be all you can be."						
<u>Army</u>	70.9	79.2	78.0 (1.2)	80.0	68.7	69.2 (2.3)
<u>Navy</u>	7.3	3.9	4.4 (0.4)	3.9	5.7	5.6 (1.0)
<u>Marine Corps</u>	5.3	2.4	2.8 (0.4)	6.3	5.4	5.4 (1.0)
<u>Air Force</u>	4.3	5.1	5.0 (0.6)	6.6	6.8	6.8 (1.1)
<u>Joint Services</u>	3.6	5.8	5.4 (0.6)	3.2	4.6	4.6 (1.1)
Don't know	8.7	3.6	4.4 (0.7)	0.0	8.8	8.3 (2.0)
"_____. It's not just a job, it's an adventure."						
<u>Army</u>	38.8	35.0	35.5 (1.3)	32.2	32.3	32.3 (1.9)
<u>Navy</u>	22.4	21.6	21.8 (1.1)	27.1	23.9	24.1 (2.0)
<u>Marine Corps</u>	14.3	13.3	13.4 (0.8)	16.4	11.1	11.4 (1.1)
<u>Air Force</u>	12.2	11.2	11.4 (0.8)	10.3	15.2	15.0 (1.4)
<u>Joint Services</u>	5.5	7.1	6.9 (0.7)	6.9	4.8	4.9 (0.8)
Don't know	6.8	11.8	11.1 (0.9)	7.2	12.6	12.4 (1.8)
"The few, the proud, the _____."						
<u>Army</u>	13.8	7.3	8.2 (0.9)	3.8	5.3	5.2 (0.7)
<u>Navy</u>	8.0	6.2	6.4 (0.6)	3.9	5.5	5.7 (1.1)
<u>Marine Corps</u>	53.5	67.1	65.0 (1.3)	66.0	73.7	73.3 (2.0)
<u>Air Force</u>	6.3	4.8	5.0 (0.6)	10.2	2.7	3.0 (0.6)
<u>Joint Services</u>	3.3	3.7	3.7 (0.5)	6.1	1.0	1.3 (0.4)
Don't know	15.1	11.0	11.6 (1.0)	5.1	11.8	11.5 (1.7)
"Aim high. _____."						
<u>Army</u>	11.8	5.5	6.5 (0.9)	4.7	6.3	6.2 (1.3)
<u>Navy</u>	4.2	3.5	3.6 (0.4)	4.6	5.3	5.3 (1.0)
<u>Marine Corps</u>	2.5	2.6	2.6 (0.3)	3.1	3.7	3.7 (0.6)
<u>Air Force</u>	71.6	78.9	77.8 (1.2)	83.7	70.2	70.8 (2.1)
<u>Joint Services</u>	1.2	1.1	1.1 (0.2)	0.0	1.8	1.8 (0.5)
Don't know	8.8	8.4	8.4 (0.8)	4.1	12.7	12.3 (1.7)
"It's a great place to start."						
<u>Army</u>	40.9	35.4	36.2 (1.4)	27.7	32.0	31.8 (2.0)
<u>Navy</u>	14.9	12.6	13.0 (0.8)	19.6	15.3	15.3 (1.5)
<u>Marine Corps</u>	12.4	9.2	9.6 (0.8)	0.0	6.5	6.2 (0.7)
<u>Air Force</u>	11.4	10.8	10.8 (0.8)	9.7	10.7	10.6 (1.5)
<u>Joint Services</u>	7.6	12.7	12.0 (0.8)	25.7	12.7	13.4 (1.6)
Don't know	12.9	19.3	18.4 (0.9)	17.3	22.8	22.5 (1.7)
"We're looking for a few good men."						
<u>Army</u>	22.9	21.4	21.6 (1.0)	28.1	23.3	23.5 (1.8)
<u>Navy</u>	16.4	14.5	14.8 (1.1)	7.9	11.1	11.0 (1.7)
<u>Marine Corps</u>	36.5	38.2	38.0 (1.3)	39.5	44.0	43.8 (2.1)
<u>Air Force</u>	9.2	5.9	6.4 (0.8)	1.4	4.7	4.5 (0.7)
<u>Joint Services</u>	4.0	5.7	5.4 (0.5)	8.6	5.0	5.1 (0.7)
Don't know	10.9	14.4	13.9 (0.8)	14.5	12.0	12.1 (1.2)
"We're not a company—we're a country."						
<u>Army</u>	17.3	17.7	17.7 (1.0)	21.1	17.6	17.8 (1.5)
<u>Navy</u>	16.1	9.3	10.3 (0.9)	10.7	9.7	9.8 (1.6)
<u>Marine Corps</u>	8.6	11.0	10.6 (0.8)	15.1	8.8	9.1 (0.9)
<u>Air Force</u>	6.2	5.8	5.8 (0.6)	2.2	4.6	4.5 (0.7)
<u>Joint Services</u>	20.5	25.8	25.0 (1.1)	23.5	23.6	23.6 (2.0)
Don't know	31.3	30.5	30.6 (1.2)	27.4	35.6	35.2 (2.0)

Note: Tabled values are column percentages with standard errors in parentheses; correct responses for each slogan are underlined.

Source: Questions 510-513, 610-615.

Table C.10a. Service Images Among Males

Image Statement/Response <sup>a</sup>	Young Males			Older Males		
	Positive Propensity (n=1,874)	Negative Propensity (n=3,768)	Total (n=5,642)	Positive Propensity (n=172)	Negative Propensity (n=931)	Total (n=1,103)
<b>Provides Money for Education</b>						
Army	57.0	60.0	59.1 (0.9)	44.7	52.7	51.4 (1.7)
Navy	12.9	12.3	12.5 (0.6)	12.2	11.6	11.7 (1.1)
Marine Corps	8.8	8.5	8.6 (0.5)	7.0	8.5	8.2 (0.9)
Air Force	17.4	12.9	14.4 (0.6)	30.4	20.2	21.8 (1.4)
None/Refused	1.9	4.0	3.3 (0.4)	4.3	3.6	3.7 (0.7)
Don't Know	2.0	2.2	2.2 (0.3)	1.4	3.5	3.2 (0.6)
<b>Lack of Personal Freedom</b>						
Army	18.0	18.9	18.6 (0.7)	13.3	15.7	15.4 (1.2)
Navy	20.7	18.1	19.0 (0.6)	30.0	24.4	25.3 (1.6)
Marine Corps	40.6	42.5	41.9 (0.9)	35.6	42.5	41.4 (1.7)
Air Force	7.3	5.7	6.2 (0.5)	8.6	5.9	6.4 (0.9)
None/Refused	9.1	9.9	9.7 (0.5)	9.1	6.9	7.2 (0.8)
Don't Know	4.3	4.9	4.7 (0.4)	3.3	4.6	4.4 (0.7)
<b>Teaches Valuable Skills and Trades</b>						
Army	33.2	33.2	33.2 (0.8)	26.4	27.3	27.1 (1.5)
Navy	18.1	17.1	17.5 (0.7)	21.2	19.1	19.4 (1.4)
Marine Corps	14.0	12.9	13.2 (0.6)	10.3	10.7	10.6 (1.0)
Air Force	31.0	31.0	31.0 (0.8)	35.6	37.0	36.8 (1.6)
None/Refused	2.3	3.7	3.3 (0.4)	1.7	2.9	2.7 (0.6)
Don't Know	1.4	2.1	1.9 (0.2)	4.9	3.1	3.4 (0.6)
<b>Extended Duty Away from Immediate Family</b>						
Army	19.6	18.6	19.0 (0.7)	15.6	14.5	14.7 (1.2)
Navy	46.5	46.9	46.8 (0.9)	42.7	52.4	50.8 (1.7)
Marine Corps	18.7	19.0	18.9 (0.7)	25.0	18.6	19.6 (1.4)
Air Force	10.0	7.8	8.5 (0.5)	8.6	6.5	6.9 (0.8)
None/Refused	2.8	5.0	4.3 (0.4)	4.1	4.6	4.5 (0.8)
Don't Know	2.4	2.7	2.6 (0.3)	4.0	3.4	3.5 (0.6)
<b>Opportunities for Promotion and Advancement</b>						
Army	31.4	37.6	35.6 (0.9)	21.8	30.7	29.3 (1.6)
Navy	16.0	15.2	15.5 (0.6)	17.0	15.4	15.7 (1.3)
Marine Corps	14.9	12.1	13.0 (0.6)	14.7	11.2	11.8 (1.1)
Air Force	32.4	26.8	28.6 (0.8)	35.8	33.6	34.0 (1.6)
None/Refused	2.9	5.7	4.8 (0.5)	4.7	5.1	5.1 (0.7)
Don't Know	2.3	2.7	2.6 (0.3)	5.9	4.0	4.2 (0.7)
<b>Equal Pay and Advancement for Men and Women</b>						
Army	47.4	48.2	47.9 (0.9)	42.0	47.5	46.6 (1.7)
Navy	12.8	15.1	14.4 (0.6)	20.4	15.3	16.1 (1.3)
Marine Corps	9.6	6.7	7.6 (0.4)	7.3	7.9	7.8 (0.9)
Air Force	23.2	19.4	20.6 (0.7)	23.7	19.1	19.8 (1.3)
None/Refused	4.1	7.2	6.2 (0.5)	4.2	5.3	5.1 (0.7)
Don't Know	3.0	3.4	3.3 (0.3)	2.8	5.0	4.6 (0.7)
<b>Assignment to Work That Does Not Prepare You for a Civilian Career</b>						
Army	21.7	21.3	21.5 (0.7)	34.5	24.1	25.8 (1.5)
Navy	17.5	17.3	17.4 (0.7)	18.2	15.0	15.5 (1.3)
Marine Corps	31.2	31.1	31.2 (0.8)	26.2	32.6	31.6 (1.6)
Air Force	11.6	11.5	11.5 (0.5)	4.8	11.3	10.3 (1.1)
None/Refused	11.9	13.6	13.1 (0.6)	11.0	11.3	11.3 (1.0)
Don't Know	6.0	5.1	5.4 (0.5)	5.5	5.7	5.7 (0.8)
<b>Defending Your Country</b>						
Army	40.7	40.3	40.4 (0.9)	30.5	34.7	34.0 (1.6)
Navy	7.1	7.9	7.7 (0.5)	9.9	6.9	7.3 (0.8)
Marine Corps	36.9	36.7	36.8 (0.9)	43.8	42.8	42.9 (1.7)
Air Force	11.8	9.0	9.9 (0.6)	13.5	9.8	10.4 (1.1)
None/Refused	2.2	4.1	3.5 (0.4)	1.0	3.1	2.7 (0.6)
Don't Know	1.4	1.9	1.7 (0.3)	1.4	2.8	2.5 (0.5)
<b>Working in High Technology Environment</b>						
Army	13.1	12.2	12.5 (0.6)	7.4	9.1	8.8 (1.0)
Navy	15.7	16.9	16.5 (0.6)	20.2	18.4	18.7 (1.3)
Marine Corps	7.9	6.1	6.7 (0.4)	7.1	5.9	6.1 (0.8)
Air Force	60.9	60.6	60.7 (0.9)	62.0	62.4	62.3 (1.7)
None/Refused	1.1	2.8	2.2 (0.4)	2.0	1.8	1.8 (0.5)
Don't Know	1.3	1.4	1.4 (0.2)	1.4	2.4	2.2 (0.5)
<b>Work in or Near a Combat Zone</b>						
Army	45.6	43.3	44.0 (0.9)	41.6	39.1	39.5 (1.7)
Navy	6.7	8.0	7.6 (0.5)	8.8	9.4	9.3 (0.9)
Marine Corps	39.1	39.7	39.5 (0.9)	41.5	44.0	43.6 (1.7)
Air Force	5.5	4.7	5.0 (0.4)	6.8	2.9	3.5 (0.6)
None/Refused	1.5	3.0	2.5 (0.4)	0.0	1.8	1.5 (0.4)
Don't Know	1.7	1.4	1.5 (0.2)	1.4	2.8	2.6 (0.5)

Note: Tabled values are column percentages with standard errors in parentheses.

<sup>a</sup>Service mentioned is the one respondent thought of first in response to each image.

Source: Questions 510-513, 650-659.



Table C.10b. Service Images Among Females

Image Statement/Response <sup>a</sup>	Young Females			Older Females		
	Positive Propensity (n=476)	Negative (n=2,972)	Total (n=3,448)	Positive Propensity (n=63)	Negative (n=1,025)	Total (n=1,078)
<b>Provides Money for Education</b>						
Army	48.9	54.8	53.9 (1.3)	52.7	48.2	48.4 (2.2)
Navy	10.8	12.4	12.2 (0.8)	13.1	15.2	15.1 (1.7)
Marine Corps	8.0	10.9	10.5 (0.9)	1.3	11.9	11.4 (1.5)
Air Force	28.6	14.4	16.2 (1.1)	28.0	16.6	17.1 (1.6)
None/Refused	3.3	4.0	3.9 (0.5)	0.0	4.0	3.8 (0.8)
Don't Know	2.3	3.5	3.3 (0.5)	5.0	4.1	4.2 (0.9)
<b>Lack of Personal Freedom</b>						
Army	27.3	23.9	24.4 (1.1)	25.7	23.9	23.9 (1.8)
Navy	20.9	21.6	21.5 (1.3)	27.3	17.7	18.2 (1.5)
Marine Corps	30.0	31.4	31.2 (1.2)	28.4	35.7	35.4 (2.1)
Air Force	10.8	7.0	7.6 (0.6)	13.3	7.3	7.6 (1.5)
None/Refused	8.4	10.8	10.4 (0.8)	2.4	9.7	9.4 (1.0)
Don't Know	2.6	5.3	4.9 (0.6)	2.8	5.7	5.6 (0.8)
<b>Teaches Valuable Skills and Trades</b>						
Army	38.7	32.3	33.2 (1.3)	24.0	28.9	28.6 (2.0)
Navy	15.0	16.1	16.0 (1.0)	12.2	15.6	15.5 (1.5)
Marine Corps	14.1	14.2	14.1 (0.9)	14.2	13.1	13.1 (1.7)
Air Force	28.9	29.5	29.4 (1.2)	43.6	34.4	34.8 (2.0)
None/Refused	2.0	4.4	4.1 (0.6)	0.0	4.7	4.5 (0.7)
Don't Know	1.4	3.5	3.2 (0.5)	5.9	3.4	3.5 (0.6)
<b>Extended Duty Away from Immediate Family</b>						
Army	25.5	24.2	24.4 (1.2)	24.9	20.9	21.1 (1.5)
Navy	30.5	36.2	35.3 (1.2)	31.7	42.1	41.6 (2.1)
Marine Corps	24.8	19.2	20.0 (1.1)	27.6	19.3	19.7 (2.1)
Air Force	14.4	12.1	12.5 (0.9)	13.0	9.7	9.9 (1.0)
None/Refused	3.5	4.7	4.5 (0.5)	0.0	3.9	3.7 (0.7)
Don't Know	1.2	3.6	3.2 (0.5)	2.8	4.1	4.0 (0.9)
<b>Opportunities for Promotion and Advancement</b>						
Army	32.7	32.9	32.9 (1.2)	44.2	26.8	27.6 (1.6)
Navy	14.0	14.4	14.4 (0.8)	8.9	15.2	14.9 (1.4)
Marine Corps	15.1	15.1	15.1 (1.0)	13.9	15.7	15.6 (1.9)
Air Force	30.9	27.9	28.3 (1.2)	28.0	30.4	30.3 (1.9)
None/Refused	5.2	6.0	5.9 (0.8)	0.0	5.6	5.4 (1.0)
Don't Know	2.2	3.7	3.5 (0.4)	4.9	6.2	6.2 (1.6)
<b>Equal Pay and Advancement for Men and Women</b>						
Army	45.7	45.2	45.3 (1.3)	43.4	40.7	40.9 (2.1)
Navy	14.0	14.0	14.0 (0.9)	12.5	15.2	15.1 (1.8)
Marine Corps	8.7	9.8	9.6 (0.8)	11.9	8.7	8.9 (1.4)
Air Force	22.7	17.8	18.6 (0.9)	27.8	20.8	21.1 (1.6)
None/Refused	6.3	8.0	7.7 (1.0)	0.0	9.6	9.1 (1.5)
Don't Know	2.6	5.3	4.9 (0.6)	4.4	5.0	4.9 (0.8)
<b>Assignment to Work That Does Not Prepare You for a Civilian Career</b>						
Army	24.1	21.7	22.0 (1.0)	18.1	19.5	19.5 (1.4)
Navy	22.5	19.7	20.1 (1.1)	24.8	19.2	19.5 (1.7)
Marine Corps	22.6	23.3	23.2 (1.1)	31.2	24.0	24.3 (1.9)
Air Force	12.9	15.0	14.7 (0.9)	16.1	13.7	13.8 (1.8)
None/Refused	11.4	14.2	13.8 (0.9)	3.9	15.5	15.0 (1.5)
Don't Know	6.6	6.2	6.2 (0.8)	5.9	8.1	8.0 (1.1)
<b>Defending Your Country</b>						
Army	54.9	57.6	57.2 (1.3)	52.8	51.4	51.4 (2.2)
Navy	6.7	8.7	8.4 (0.8)	10.3	10.2	10.2 (1.9)
Marine Corps	24.3	20.2	20.9 (1.1)	14.2	23.0	22.6 (1.9)
Air Force	10.7	8.5	8.9 (0.7)	17.8	9.0	9.4 (1.0)
None/Refused	1.5	2.5	2.4 (0.3)	0.0	3.8	3.6 (0.9)
Don't Know	2.1	2.3	2.3 (0.4)	5.0	2.8	2.9 (0.6)
<b>Working in High Technology Environment</b>						
Army	11.6	12.0	11.9 (0.8)	18.0	8.8	9.2 (0.9)
Navy	13.4	16.7	16.2 (0.9)	15.0	20.9	20.7 (2.0)
Marine Corps	14.4	10.6	11.2 (0.9)	6.7	8.2	8.1 (0.9)
Air Force	58.1	55.8	56.0 (1.3)	57.5	57.2	57.3 (2.1)
None/Refused	1.1	2.6	2.3 (0.4)	0.0	2.4	2.2 (0.5)
Don't Know	1.4	2.7	2.5 (0.4)	2.8	2.5	2.5 (0.5)
<b>Work in or Near a Combat Zone</b>						
Army	59.7	56.4	56.9 (1.3)	60.1	52.8	53.2 (2.2)
Navy	9.0	10.0	9.8 (0.6)	10.2	9.4	9.4 (1.5)
Marine Corps	20.7	22.1	21.9 (1.1)	21.5	27.2	27.0 (2.1)
Air Force	6.6	6.5	6.5 (0.6)	5.6	5.3	5.3 (1.0)
None/Refused	1.6	2.2	2.1 (0.4)	0.0	2.4	2.3 (0.6)
Don't Know	2.4	2.9	2.8 (0.5)	2.8	2.9	2.9 (0.6)

Note: Tabled values are column percentages with standard errors in parentheses.

<sup>a</sup>Service mentioned is the one respondent thought of first in response to each image.

Source: Questions 510-513, 650-659.

Table C.11 Presence and Use of Computerized Career Information System at High Schools

Presence of System/Use	Young Males			Young Females		
	Positive Propensity	Negative Propensity	Total	Positive Propensity	Negative Propensity	Total
System Present <sup>a</sup>	55.6(1.5)	60.1 (1.1)	58.6 (0.9)	62.9 (3.5)	60.2 (1.3)	60.6 (1.3)
Used and obtained information about military <sup>b</sup>	30.0(1.8)	23.8 (1.2)	25.7 (1.0)	23.7 (4.7)	19.5 (1.4)	20.1 (1.4)
Used but did not obtain information about military <sup>b</sup>	48.9(2.0)	57.9 (1.3)	55.2 (1.1)	58.9 (4.6)	60.2 (1.8)	60.0 (1.7)
Did not use system <sup>b</sup>	21.2(1.6)	18.3 (1.0)	19.2 (0.9)	17.4 (2.7)	20.4 (1.5)	19.9 (1.3)
System Not Present	35.3(1.5)	33.4 (1.1)	34.0 (0.9)	29.5 (3.2)	33.4 (1.3)	32.8 (1.2)
Don't Know	9.1(0.9)	6.5 (0.6)	7.4 (0.5)	7.6 (1.5)	6.4 (0.7)	6.6 (0.6)

Note: Tabled values are percentages with standard errors in parentheses. Items were not asked of older males or older females.

<sup>a</sup>Estimates are based on interviews with 5,585 young males (1,849 with positive propensity and 3,736 with negative propensity) and 3,419 young females (469 with positive propensity and 2,950 with negative propensity).

<sup>b</sup>Estimates based on respondents who said "Yes," they had computerized career information at their high schools: 3,307 young males (1,046 with positive propensity and 2,261 with negative propensity) and 2,036 young females (282 with positive propensity and 1,754 with negative propensity).

Source: Questions 510-513, 710-712.

Table C.12a. Males' Contact with Recruiters by Service Represented and Method of First Contact

Sponsor/Method of First Contact	Young Males			Older Males		
	Positive Propensity (n=1,873)	Negative Propensity (n=3,762)	Total (n=5,635)	Positive Propensity (n=172)	Negative Propensity (n=931)	Total (n=1,103)
<b>Army</b>						
Got a phone call	5.0	8.2	7.2 (0.4)	6.5	4.9	5.1 (0.7)
Made a phone call	1.1	0.9	1.0 (0.2)	8.5	3.9	4.6 (0.7)
At recruiting station	4.6	2.6	3.2 (0.3)	9.4	7.2	7.6 (0.9)
At job fair	0.4	0.2	0.3 (0.1)	0.0	0.3	0.2 (0.1)
At school	11.6	8.8	9.7 (0.5)	7.5	5.3	5.7 (0.8)
Some other way (Don't Know)	3.4	2.2	2.6 (0.3)	1.4	1.6	1.6 (0.4)
Any contact with Army recruiter	25.7	22.7	23.7 (0.7)	33.3	22.9	24.6 (1.5)
<b>Navy</b>						
Got a phone call	2.9	4.1	3.8 (0.3)	2.1	2.9	2.8 (0.5)
Made a phone call	1.1	0.5	0.7 (0.1)	2.1	1.6	1.6 (0.4)
At recruiting station	3.1	1.3	1.9 (0.3)	5.0	3.3	3.6 (0.6)
At job fair	0.1	0.1	0.1 ( ** )	0.0	0.3	0.2 (0.2)
At school	5.5	3.7	4.3 (0.4)	1.5	3.0	2.8 (0.5)
Some other way (Don't know)	1.7	0.8	1.1 (0.2)	3.5	1.2	1.5 (0.4)
Any contact with Navy recruiter	14.4	10.6	11.8 (0.6)	14.4	12.2	12.6 (1.1)
<b>Marine Corps</b>						
Got a phone call	2.8	4.5	3.9 (0.3)	3.2	3.3	3.3 (0.6)
Made a phone call	0.5	0.3	0.3 (0.1)	3.3	1.6	1.9 (0.4)
At recruiting station	2.4	1.1	1.5 (0.3)	5.7	3.1	3.5 (0.7)
At job fair	0.2	0.1	0.1 (0.1)	0.0	0.2	0.2 (0.2)
At school	8.2	4.3	5.6 (0.4)	3.5	3.3	3.4 (0.6)
Some other way (Don't know)	1.4	1.0	1.1 (0.2)	1.4	0.8	0.9 (0.3)
Any contact with Marine Corps recruiter	15.5	11.2	12.6 (0.6)	17.0	12.4	13.2 (1.2)
<b>Air Force</b>						
Got a phone call	1.7	2.2	2.0 (0.2)	2.7	2.1	2.2 (0.5)
Made a phone call	0.9	0.5	0.7 (0.1)	2.0	2.0	2.0 (0.4)
At recruiting station	2.9	1.1	1.7 (0.2)	4.6	3.7	3.8 (0.6)
At job fair	0.5	0.3	0.3 (0.1)	0.0	0.0	0.0 ( ** )
At school	8.3	4.1	5.4 (0.4)	3.0	3.7	3.6 (0.6)
Some other way (Don't know)	2.0	0.4	0.9 (0.1)	1.0	0.4	0.5 (0.2)
Any contact with Air Force recruiter	16.3	8.5	11.0 (0.5)	13.4	11.8	12.1 (1.1)
<b>Any Military Recruiter</b>						
Got a phone call	10.2	14.3	13.0 (0.5)	14.6	10.4	11.1 (1.0)
Made a phone call	3.4	2.0	2.5 (0.3)	14.2	7.6	8.6 (1.0)
At recruiting station	10.9	5.2	7.1 (0.5)	21.1	13.8	15.0 (1.3)
At job fair	0.3	0.5	0.6 (0.1)	0.0	0.7	0.6 (0.2)
At school	24.9	15.8	18.8 (0.7)	13.1	12.8	12.8 (1.1)
Some other way (Don't know)	7.7	4.0	5.2 (0.4)	6.8	3.6	4.1 (0.7)
Any contact with a military recruiter	55.1	39.7	44.7 (0.9)	65.0	46.9	49.8 (1.7)

Note: Tabled values are column percentages with standard errors in parentheses. Estimates for contact with Army, Navy, Marine Corps, and Air Force Recruiters include active and Reserve components. "Any contact" includes all reported contacts.

\*\*Informative standard error not available.

Source: Questions 510-513, 628, 629, 632, 635, 638 and 641.

Table C.12b. Females' Contact with Recruiters by Service Represented and Method of First Contact

Sponsor/Method of First Contact	Young Females			Older Females		
	Positive Propensity (n=475)	Negative Propensity (n=2,969)	Total (n=3,444)	Positive Propensity (n=53)	Negative Propensity (n=1,022)	Total (n=1,075)
<b>Army</b>						
Got a phone call	2.5	2.9	2.8 (0.4)	3.4	1.3	1.4 (0.4)
Made a phone call	0.9	0.5	0.5 (0.1)	3.3	2.1	2.1 (0.5)
At recruiting station	2.7	1.1	1.4 (0.4)	4.7	2.2	2.3 (0.5)
At job fair	0.7	2.4	0.5 (0.1)	0.0	0.1	0.1 (0.1)
At school	11.8	6.2	7.0 (0.7)	6.3	5.4	5.4 (1.0)
Some other way (Don't know)	2.4	1.6	1.7 (0.4)	5.8	0.4	0.7 (0.3)
Any contact with Army recruiter	20.9	12.5	13.8 (0.9)	23.4	11.1	11.7 (1.2)
<b>Navy</b>						
Got a phone call	0.5	0.2	0.3 (0.1)	0.0	0.1	0.1 (0.1)
Made a phone call	0.5	0.1	0.1 (0.1)	3.5	1.0	1.1 (0.3)
At recruiting station	1.7	0.5	0.6 (0.1)	3.4	1.7	1.8 (0.4)
At job fair	0.4	0.3	0.3 (0.1)	0.0	0.0	0.0 ( **)
At school	8.4	2.3	3.2 (0.5)	3.9	1.7	1.8 (0.4)
Some other way (Don't know)	0.8	0.4	0.4 (0.1)	4.6	0.4	0.6 (0.3)
Any contact with Navy recruiter	12.3	3.7	5.0 (0.5)	15.4	4.9	5.4 (0.7)
<b>Marine Corps</b>						
Got a phone call	1.0	0.4	0.5 (0.1)	2.2	0.2	0.3 (0.2)
Made a phone call	0.1	0.1	0.1 (0.1)	1.5	0.0	0.1 (0.1)
At recruiting station	0.2	0.2	0.2 (0.1)	2.4	0.6	0.7 (0.3)
At job fair	3.3	0.2	0.2 (0.1)	0.0	0.0	0.0 ( **)
At school	4.3	2.1	2.5 (0.4)	0.0	1.1	1.0 (0.3)
Some other way (Don't know)	1.6	0.9	1.0 (0.4)	1.1	0.4	0.5 (0.2)
Any contact with Marine Corps recruiter	7.5	3.8	4.4 (0.6)	7.3	2.4	2.6 (0.5)
<b>Air Force</b>						
Got a phone call	1.1	0.5	0.6 (0.1)	1.9	0.4	0.4 (0.2)
Made a phone call	0.9	0.3	0.4 (0.1)	13.1	0.9	1.5 (0.4)
At recruiting station	1.9	0.5	0.7 (0.1)	4.4	2.2	2.3 (0.5)
At job fair	0.1	0.3	0.2 (0.1)	0.0	0.1	0.1 (0.1)
At school	8.4	2.9	3.7 (0.4)	2.1	2.2	2.2 (0.5)
Some other way (Don't know)	1.2	0.6	0.7 (0.2)	3.6	0.5	0.6 (0.3)
Any contact with Air Force recruiter	13.6	5.0	6.3 (0.5)	25.2	6.2	7.1 (0.9)
<b>Any Military Recruiter</b>						
Got a phone call	4.6	3.8	3.9 (0.5)	7.5	1.9	2.2 (0.4)
Made a phone call	2.4	0.8	1.0 (0.2)	16.8	3.7	4.3 (0.7)
At recruiting station	5.2	2.0	2.5 (0.4)	13.4	5.5	5.9 (0.8)
At job fair	1.0	0.6	0.7 (0.1)	0.0	0.2	0.2 (0.1)
At school	26.1	11.5	13.7 (0.9)	12.3	7.7	7.9 (1.1)
Some other way (Don't know)	5.4	2.9	3.3 (0.5)	9.4	1.6	2.0 (0.5)
Any contact with a military recruiter	44.2	21.9	25.2 (1.2)	54.5	19.9	21.6 (1.5)

Note: Tabled values are column percentages with standard errors in parentheses. Estimates for contact with Army, Navy, Marine Corps, and Air Force Recruiters include active and Reserve components. "Any contact" includes all reported contacts.

\*\*Informative standard error not available.

Source: Questions 510-513, 628, 629, 632, 635, 638 and 641.

Appendix D

Multiple Regression Variables and Analytical Approach

## Appendix D

### Multiple Regression Variables and Analytical Approach

This appendix provides detailed information about the multiple regression analyses (reported in Chapter 11) which were conducted on the young male and young female data. The first section defines the variables which were used in the analyses and details how the variables were constructed. The second section provides the rationale for the analytical approach.

#### A. Variable Definitions

The dependent variable for the regression analyses is Composite Active Propensity. It is classified in a binary fashion, where 1 = positive propensity and 0 = negative propensity.

The independent variables fall into two groups broadly described as sociodemographic variables and as psychological/behavioral variables.

##### 1. Sociodemographic Variables

Eight sociodemographic variables were used in the regression analyses. They were respondent's age, race/ethnicity, educational status, father's education, marital status, student status, employment status and predicted AFQT category. For the analyses, the coding of the independent variables determined the comparisons which were made.

- Age retained its original coding of years (16-21) [Q403].
- Race/ethnicity was coded to compare Blacks, Hispanics and "other nonwhites" to whites [Qs 714 and 715].
- Educational status was defined as number of years of education completed and coded to compare those who had completed 10 years or less, 11 years, and more than 12 years with those who had completed 12 years of education [Q404].

- Father's education was also defined as number of years of education completed and coded to compare those who had completed 10 years or less, 11 years, and more than 12 years with those who had completed 12 years of education [Q713].
- Marital status was coded to compare those who were married with those who were "other than married" (widowed, separated, divorced or never married) [Q713C].
- Student status was coded to compare non-student and part-time students with full-time students [Qs 407 and 409A].
- Employment status was coded to compare those who were unemployed and looking for a job, employed full time, and employed part time with those who were unemployed but not looking for a job [Qs 416 and 417].
- Predicted AFQT category retained its original coding of the predicted probability that respondents will fall in categories I-IIIA on the Armed Forces Qualification Test (AFQT).

## 2. Psychological/Behavioral Variables

Twelve psychological/behavioral variables were used in the regression analyses. Four of these variables were constructed as composites of two or more questionnaire items. Three of these variables were coded dichotomously to reflect yes-no comparisons in response to the item specified. Responses to the remaining five variables had been made on scales and were thus coded as continuous variables.

- Difficulty finding a full-time job represented the respondent's perception of how difficult it is for "someone your age to get a full-time job in your community." Responses were coded on a 1-4 scale with "1" representing "almost impossible" and "4" representing "not difficult at all" [Q436].

- Accuracy of slogan sponsor attribution is a composite measure. For each correct sponsor attribution for the seven Service slogans, the score for this measure was incremented by one. Thus, scores could range from "0" (no correct sponsor attributions to slogans) to "7" (seven correct sponsor attributions to slogans) [Qs 610-612, 613A, 614, 615A, 615B].
- Exposure to different media is a composite measure. For each form of advertising media exposure (print, broadcast, unsolicited mailed recruiting literature) to which the respondent reported exposure, the score for this measure was incremented by one. Thus, scores could range from "0" (no recalled exposure) to "3" (exposure to all three sources) [Qs 616, 618 and 620].
- Knowledge of educational benefits was coded to contrast whether the respondent knew that at least one Service has a program that helps pay for college or vocational training (Yes) or not (No) [Q559].
- Previous consideration of military service is coded on a 1-3 scale where "1" indicates that the respondent had never considered the possibility of joining the military prior to the survey date; "2" indicates some consideration; and "3" indicates serious consideration [Q525].
- Friend/relative enlisted was coded to contrast whether the respondent had a good friend or close relative who had signed up with one of the military services within the last 6 months (Yes) or not (No) [Q682].
- Own feelings is a scaled measure representing how the respondent feels about serving in the active military. Responses were coded on a 0-4 scale where higher numbers indicated greater favorability [Q692].



- Others' feelings is a scaled measure representing the respondent's perceptions of how the people who matter most feel about the respondent's serving in the active military. Responses were coded on a 0-4 scale where higher numbers indicated greater favorability [Q691].
- Advice to others is a scaled measure representing advice the respondent would give to a friend asking about seeing a military recruiter. Responses were coded on a 1-3 scale where 1 = a waste of time; 2 = up to him or her; and 3 = a good idea [Q690].
- Called/mailed for information is a composite measure. It represents whether the respondent called a toll-free telephone number and/or sent a postcard or coupon for information about the military in the past 12 months. For each of these actions reported, the scores in this measure was incremented by one. Thus, scores could range from "0" (neither action performed) to "2" (both actions performed) [Qs 622 and 625].
- Discussed serving with someone was coded to contrast whether the respondent had discussed the possibility of serving in the military with someone in the past year (Yes) or not (No) [Q683].
- Actions taken toward enlistment is a composite measure. It represents the number of actions toward enlistment taken by the respondent. Possible actions include: visiting a recruiting station in the past 12 months; ever having talked with a recruiter; and ever having taken the ASVAB. For each action taken, the score for this measure was incremented by one. Thus, scores could range from "0" (no actions taken) to "3" (all actions taken) [Qs 627, 628 and 645].

### 3. Interaction Variables

Interaction variables were created by crossing both age and predicted AFQT with all of the variables that were significant in the combined main effects model. For example, the interaction variable age by

Attitude Towards the Service (ATS) was created by multiplying age by ATS for each individual. Each interaction variable has a regression parameter associated with it. If the estimated interaction parameter is statistically significant, then the interpretation is that the level of one variable in the interaction variable affects the magnitude of the relationship of the remaining variable with the dependent variable.

#### B. Rationale of Analytical Approach

There are a number of approaches for modeling a binary (0,1) dependent measure such as Composite Positive Propensity. Two widely used approaches are ordinary multiple regression and logistic regression. Ordinary multiple regression makes the assumption that the probability of the outcome measure (e.g., positive propensity) is a linear function of the independent variables. Thus, it is sometimes referred to as a linear probability model. In contrast, the logistic regression model assumes a non-linear relationship between the independent variables and the probability of the outcome measure. The relationship between each independent variable and the probability of the outcome measure is assumed to approximate a normal distribution function (i.e., an s-shaped curve).

A linear probability model was chosen over a logistic regression model as the analytic technique used in Chapter 11 of this report because of its ease of interpretation and its consistency with the use of probabilities (percentages) presented in the descriptive tables. The estimated regression parameters can be interpreted forthright as differences in probabilities of positive propensity between levels of a particular independent variable adjusting for the effects of other independent variables in the model. Although the linear probability model does have certain limitations as discussed below, for the purposes of our analyses, these limitations were not problematic.

The linear probability model can sometimes result in predicted probabilities that are outside the range of 0 to 1, the admissible values for probabilities. However, we are not as interested in predicted probabilities as we are in the separate effects of the independent variables on the

probability of positive propensity. The linear probability model is unbiased but is inefficient; but with the large sample size for YATS, this is not a critical limitation.

Logistic regression alleviates the problems discussed above. This technique transforms probabilities to a log odds scale that can take the range of  $-\infty$  to  $+\infty$ . The parameters of the logistic model then have to be interpreted with respect to the log odds scale (or with respect to the odds scale with a transformation of the parameters), however, rather than with the probabilities themselves. Interpreting parameters of the log odds scale (or the odds scale) is less informative and less straightforward for most people than interpreting probabilities.

For the analyses conducted in Chapter 11, the results of the linear probability model and the logistic regression model would be highly similar with respect to the statistically significant predictors of positive enlistment propensity. The reason for the similarities is that overall probability of positive propensity was about .30 and the logistic function is essentially linear for probabilities centered about .30.

Appendix E

Cross Reference - 1983-1987 VATS Questionnaires

# Cross Reference

## 1983-1987 YATS II Questionnaires

Question Number				
1986 & 1987	1985	1984	1983	Comments*
401	401	401	A1	Same
402	402	402	A2	Same
403	403	403	A3	Same
404	404	404	A4	Reworded in 1984. Response categories added in 1986
--	--	--	A5/A6	Dropped in 1984
405	405	405	A7	Same
406	406	406	--	Added in 1984
407	407	407	A11	Same
408A	408	408	A12	Same
408B	--	--	--	Added in 1986
408C	--	--	A13	Dropped in 1984. Reworded and added in 1986
409A	409	409	A14	Same
409B	--	--	--	Added in 1986
410A	410A	410A	--	Added in 1984
410B	410B	410B	A8	Reworded in 1984
411	411	411	A9	Same
412-414	412-414	412-414	--	Added in 1984
415	415	415	A10	Reworded in 1984
--	--	--	A15-A16	Dropped in 1984
416	416	416	A17	Same
417	417	417	A18	Reworded in 1984
--	--	418	--	Added in 1984. Dropped in 1985
419	419	419	A19	Same
--	--	420	A20	Same. Dropped in 1985
--	--	421	A21	Same. Dropped in 1985
422A	422	422	A22	Reworded in 1984
422B	--	--	--	Added in 1986
--	--	423	--	Added in 1984. Dropped in 1985
424B	424	424	A23	Same
--	425	425	A24	Same. Dropped in 1986

\*"Same" without additional comment indicates the question wording was the same for all four years. "Same" followed by a comment applicable to 1985 or 1986 indicates that question wording was the same for 1983 until the year noted.

# Cross Reference

## 1983-1987 YATS II Questionnaires (continued)

Question Number				
1986 & 1987	1985	1984	1983	Comments*
--	--	426/427	A26	Reworded in 1984. Dropped in 1985
--	--	428	A25	Same. Dropped in 1985
--	--	429	A27	Same; Dropped in 1985
--	--	--	A28	Dropped in 1984
--	--	--	A29	Dropped in 1984
430	430	430	A30	Same
--	--	--	A31-A34	Dropped in 1984
431	431	431	A35	Reworded in 1984
--	432	432	A36	Same. Dropped in 1986
--	--	433	A37	Same; Dropped in 1985
434	434	434	A38	Reworded in 1984
435	435	435	A39	Probe added in 1984
436	436	436	A40	Same
437	437	437	A41	Same
438	438	438	A42	Same
--	439	439	A43	Same. Dropped in 1986
440	440	440	A44	Same
441	441	441	A45	Same
442	442	442	A46	Same
443	443	443	A47	Same
444-500	444-500	444-500	--	Not used
501	501	501	B1	Same
502	502	502	B2	Same
503	503	503	B3	Same
504	504	504	B4	Same
505	505	505	B5	Same
506	506	506	B6	Same
507	507	507	B7	Same
508	508	508	B8	Same
509	509	509	B9	Same

\*"Same" without additional comment indicates the question wording was the same for all four years. "Same" followed by a comment applicable to 1985 or 1986 indicates that question wording was the same for 1983 until the year noted.

# Cross Reference

## 1983-1987 YATS II Questionnaires (continued)

Question Number				
1986 & 1987	1985	1984	1983	Comments*
510	510	510	B10	Same
511	511	511	B11	Same
512	512	512	B12	Same
513	513	513	B13	Same
514	514	514	B14	Same
515	515	515	B15	Same
516	516	516	--	Added in 1984
517	517	517	--	Added in 1984
518	518	518	--	Not used in 1984 or 1985. Added in 1986
519	519	519	--	Not used
520	520	520	B16	Same
521	521	521	B17	Same
--	--	--	B18	Dropped in 1984
522	522	522	B19	Same
--	523	523	--	Added in 1984. Dropped in 1986
--	524	524	--	Added in 1984. Dropped in 1986
525	525	525	--	Not used in 1984 or 1985. Added in 1986
526-550	526-550	526-550	--	Not used
--	--	--	B20-B34	Dropped in 1984
--	551-553	551-553	B37	Same. Dropped in 1986.
554	554	554	B38	Same. Amount updated in 1986
--	555-558	555-558	B39-B42	Split sample with 559-562 in 1983-1985. Dropped in 1986
559/562	559/562	--		Added in 1984. Split sample with 555-558 in 1984-1985.
559	559	559	--	Reworded & not split sampled in 1986
560	560	560	--	Same. Not split sampled in 1986
561	561	561	--	Same. Not split sampled in 1986
--	562	562	--	Same. Dropped in 1986
563	563	563	--	Not used in 1984 or 1985. Added in 1986
564-570	564-570	564-570	--	Not used.
--	--	--	C1-C32	Dropped in 1984

\*"Same" without additional comment indicates the question wording was the same for all four years. "Same" followed by a comment applicable to 1985 or 1986 indicates that question wording was the same for 1983 until the year noted.

# Cross Reference

## 1983-1987 YATS II Questionnaires (continued)

Question Number				
1986 & 1987	1985	1984	1983	Comments*
571	571	571	C33	Same. Reworded in 1986
572	572	572	C34	Same. Reworded in 1986
573	573	573	C35	Same. Reworded in 1986
--	--	--	C36	Dropped in 1984
574	574	574	C37	Same. Reworded in 1986
575	575	575	C38	Same. Reworded in 1986
576	576	576	C39	Same
577	577	577	C40	Same
578A	578	578	C41	Same
578B	--	--	--	Added in 1986
--	--	--	C42	Dropped in 1984
579	579	579	C43	Amount updated in 1984. Service time updated in 1986
580	580	580	C44	Amount updated in 1984. Service time updated in 1986
581	581	581	C45	Amount updated in 1984. Service time updated in 1986
582	582	582	C49	Same
583	583	583	C50	Same. Dropped in 1986
--	--	584	C51	Same. Dropped in 1985
--	--	585	C46	Amount updated in 1984. Dropped in 1985
--	--	586	C47	Amount updated in 1984. Dropped in 1985
--	--	587	C48	Amount updated in 1984. Dropped in 1985
--	--	588	C52	Split sample test in 1984. Dropped in 1985
--	--	589	C53	Same. Dropped in 1985
590-600	590-600	590-600	--	Not used
601	601	601	D1	Same. Reworded in 1986
602-608	602-608	602-608	D2	Same
609A	609A	609A	D3	Same
609B	609B	609B	--	Added in 1984

\*"Same" without additional comment indicates the question wording was the same for all four years. "Same" followed by a comment applicable to 1985 or 1986 indicates that question wording was the same for 1983 until the year noted.



# Cross Reference

## 1983-1987 YATS II Questionnaires (continued)

Question Number				
1986 & 1987	1985	1984	1983	Comments*
610	610	610	D4	Same
611	611	611	D5	Same
612	612	612	D6	Same
--	613	613	--	Added in 1984. Dropped in 1986
613A	613A	--	--	Added in 1985
614	614	614	D7	Same
615A	615	615	D8	Same
615B	--	--	--	Added in 1986
616	616	616	D9	Same
617	617	617	D10	Same
618	618	618	D11	Same. Reworded in 1985
619	619	619	D12	Same. Reworded in 1985
620	620	620	D13	Same. Reworded in 1985
621	621	621	D14	Same. Reworded in 1985
622	622	622	D15	Same. Reworded in 1985
623	623	623	D16	Same. Reworded in 1985
--	--	624	D17	Same. Dropped in 1985
625	625	625	D18	Same. Reworded in 1985
626	626	626	D19	Same. Reworded in 1985
--	--	627	D20	Same. Dropped in 1985
627	--	--	--	New item added in 1986
628	628	628	D21	Same
629	629	629	D22	Same. Reworded in 1986
630	630	630	D23	Same. Reworded in 1985
631	631	631	D24	Same
632A	632	632	D25	Reworded in 1984
632B	--	--	--	Added in 1986
--	--	--2	D26	Dropped in 1984
--	--	--	D27	Dropped in 1984
633	633	633	D28	Same
634	634	634	D29	Same
635A	635	635	D30	Reworded in 1984
635B	--	--	--	Added in 1986

\*"Same" without additional comment indicates the question wording was the same for all four years. "Same" Followed by a Comment applicable to 1985 or 1986 indicates that question wording was the same for 1983 until the year of the year noted.

# Cross Reference

## 1983-1987 YATS II Questionnaires (continued)

Question Number				Comments*
1986 & 1987	1985	1984	1983	
--	--	--	D31	Dropped in 1984
--	--	--	D32	Dropped in 1984
636	636	636	D33	Same
637	637	637	D34	Same
638A	638	638	D35	Reworded in 1984
638B	--	--	--	Added in 1986
--	--	--	D36	Dropped in 1984
--	--	--	D37	Dropped in 1984
639	639	639	D38	Reworded in 1984
640	640	640	D39	Same
641A	641	641	D40	Reworded in 1984
641B	--	--	--	Added in 1986
--	--	--	D41	Dropped in 1984
--	--	--	D42	Dropped in 1984
642	642	642	D43	Same
--	--	643	D44	Dropped in 1985
--	644	644	D45	Same. Dropped in 1986
645	645	645	D46	Reworded in 1984
--	--	--	D47	Dropped in 1984
646	646	646	D48	Reworded in 1984
647	647	647	--	Added in 1984. Dropped in 1986
--	--	648	--	Added in 1984. Dropped in 1985
--	649-678	649-678	--	Added in 1984
650-659	650-659	650-659	--	Added in 1984. Different series substituted in 1986
--	660-678	660-678	--	Added in 1984. Dropped in 1986
--	--	679	D49	Same. Dropped in 1985
--	--	680	D50	Reworded & split sampled in 1984. Dropped in 1985
--	--	681	D51	Reworded & split sampled in 1984. Dropped in 1985
--	--	--	D52-D58	Dropped in 1984
682	682	682	--	Added in 1984

\*"Same" without additional comment indicates the question wording was the same for all four years. "Same" followed by a comment applicable to 1985 or 1986 indicates that question wording was the same for 1983 until the year noted.

# Cross Reference

## 1983-1987 YATS II Questionnaires (continued)

Question Number				
1986 & 1987	1985	1984	1983	Comments*
683	683	683	D59	Reworded in 1984
684A	684/688/ 689	684/688/ 689	D60/D62/ D63	Collapsed into item in 1986
685B1- 685B6	--	--	--	Added in 1986
--	685-687	685-687	D61	Same. Dropped in 1986
--	688-689	688-689	D62	Same. Combined into 684A in 1986
690	690	690	D63	Same
691	691	691	--	Added in 1984
692	692	692	--	Added in 1984
--	--	--	D65-D67	Dropped in 1984
--	--	695	D69	Same. Dropped in 1985
--	--	696	--	Added in 1984. Dropped in 1985
--	--	697	D79	Reworded in 1984. Dropped in 1985
698	698	698	D70	Same
699	699	699	D71	Same
700	700	700	D72	Same
701	701	701	D73	Same
702-709	702-709	702-709	D74	Same
710-712	710-712	710-712	--	Added in 1984
713A	713F	713F	D75	Same
--	--	--	D76	Dropped in 1984
713B	713	713M	D77	Same
713C	693	693	D64	Same. Reworded in 1986
713D	694	694	D68	Same. Reworded in 1986
713E	--	--	--	Added in 1986
713F	--	--	--	Added in 1986
713G1-G8	--	--	--	Added in 1986
713H	--	--	--	Added in 1986
--	--	--	D78	Dropped in 1984
714	714	714	D80	Same
715	715	715	D81	Same
--	--	--	D81A1	Added in 1983. Dropped in 1984
--	--	--	D81A2	Added in 1983. Dropped in 1984
716	716	716	D82	Same
717	717	717	D83	Same
--	--	718	--	Added in 1984. Dropped in 1985

\*"Same" without additional comment indicates the question wording was the same for all four years. "Same" followed by a comment applicable to 1985 or 1986 indicates that question wording was the same for 1983 until the year noted.



Appendix F

1987 Screener and Questionnaire



Survey Screener





Questionnaire Section SC--Screening Households for Eligibles

SC\_01 Hello, my name is \_\_\_\_\_. I am calling from the Research Triangle Institute, a non-profit research firm in North Carolina. I am trying to reach (TELEPHONE NUMBER). Did I dial the correct number?

- 1 = Yes
- 2 = No + [SKIP TO NUMBER VERIFICATION SCREEN]
- 3 = LANGUAGE BARRIER + [SKIP TO CALL RECORD SCREEN-TERMINATION]

SC\_03 We are conducting an important study for the Federal Government and are calling a random sample of telephone numbers. I need to know what type of number this is. Does it serve a residence, a business, or something else?

- 1 = RESIDENCE + [SKIP TO SC\_07]
- 2 = BUSINESS/INSTITUTION
- 3 = OTHER

SC\_04A Does anyone live there on the premises?

- 1 = Yes
- 2 = No + [SKIP TO CALL RECORD SCREEN-TERMINATION]

SC\_04B Is this the number they use as their home phone?

- 1 = Yes
- 2 = No + [SKIP TO CALL RECORD SCREEN-TERMINATION]

SC\_07 Is this telephone number just for (your/one) household or does it also serve as the home telephone number for people in other households as well?

- 1 = Serves one household +[SKIP TO SC\_09A]
- 2 = Serves more than one household

SC\_08 Can you tell me the total number of households served by this telephone number?

ENTER THE TOTAL NUMBER OF HOUSEHOLDS.

Now, I would like to talk about your household only.

SC\_09A Do ten or more persons currently live in this household?

- 1 = Yes
- 2 = No + [SKIP TO SC\_10A]

SC\_09B Are any of these persons related to each other?

- 1 = Yes
- 2 = No + [SKIP TO THANK YOU SCREEN-TERMINATION]

SC\_10A Is there a telephone with a different number at this residence on which you could also be reached?

1 = Yes

2 = No → [SKIP TO SC\_11A]

SC\_10B How many different residential numbers, including this number, are there for (your home/this structure)?

ENTER NUMBER OF TELEPHONE NUMBERS

SC\_11A How many persons 15 or older live in this household? Please include anyone living or staying there now, such as friends, relatives, or boarders, and anyone who usually lives there but is now away from home such as at school, travelling, or in the hospital.

ENTER THE NUMBER

SC\_11B And how many are between the ages of 15 and 25?

ENTER THE NUMBER → [IF "0" SKIP TO TERMINATION.]

SC\_11C And how many are 25 years or older?

ENTER THE NUMBER

Now, I would like to ask you a couple of questions about each person in your household between 15 and 25 (starting with the youngest).

SC\_15 (First, is the youngest person (between 15 and 25 years of age) male or female?/ Now, for the next person (between 15 and 25 years of age). Is this person male or female?)

1 = MALE

2 = FEMALE

3 = NO MORE PEOPLE TO ENTER IN ROSTER → [SKIP TO SC\_MORE]

SC\_16 How old was (he/she) on (his/her) most recent birthday?

ENTER AGE

SKIP	(IF SC_15 = 1 AND (SC_16 <16 OR SC_16 >25)) OR (IF SC_15 = 2 AND (SC_16 <16 OR SC_16 >21)), SKIP TO THE NEXT PERSON BETWEEN 15 AND 25.
------	--

SC\_17 Is (he/she) currently a Junior or Senior in college, a college graduate, or attending graduate school?

1 = Yes → [SKIP TO NEXT PERSON BETWEEN 15 AND 25]

2 = No

SC\_18 Has (he/she) ever been in the military service, college ROTC, the National Guard, or the Reserves?

1 = Yes → [SKIP TO NEXT PERSON BETWEEN 15 AND 25]

2 = No

SC\_19 Has (he/she) been accepted for service in a branch of the Armed Forces and is now waiting to go on active duty?

1 = Yes → [SKIP TO NEXT PERSON BETWEEN 15 AND 25]

2 = No

SC\_20 Is (he/she) currently living here (at this telephone number)?

1 = Yes → [SKIP TO SC\_24]

2 = No

SC\_21 Does (he/she) have a telephone?

1 = Yes

2 = No → [SKIP TO NEXT PERSON BETWEEN 15 AND 25]

SC\_22 Does (he/she) share the telephone with ten or more people to whom (he/she) is not related?

1 = Yes

2 = No → [SKIP TO NEXT PERSON BETWEEN 15 AND 25]

SC\_23 What is (his/her) telephone number?

ENTER TELEPHONE NUMBER

SC\_24 What is (his/her) name?

ENTER FIRST AND LAST NAME

REPEAT SC\_15 THROUGH SC\_24 FOR EACH PERSON IN HOUSEHOLD BETWEEN AGES 15 AND 25.

SC\_MORE Are there any other people in the household between 15 and 25 other than those that we have already discussed?

1 = Yes

2 = No → [SKIP TO SC\_14]

SC\_HWMNY How many others?

ENTER NUMBER

REPEAT SC 15 THROUGH SC 74 ADDITIONAL ELIGIBLE PERSON IDENTIFIED.  
IF NO ELIGIBLE PERSONS ARE IDENTIFIED, SKIP TO TERMINATION.

SC\_14 The person(s) we need to interview for this study (is/are): (LIST  
OF NAMES). I would like to speak to (NAME).

- 1 = PERSON AVAILABLE
- 2 = PERSON NOT AT HOME + [SKIP TO CALL BACK SCREEN]
- 3 = REFUSAL - PERSON REFUSES TO GET ELIGIBLE PERSON(S) TO  
PHONE + [SKIP TO CONVERSION SCREEN]
- 4 = REFUSAL OF ELIGIBLE PERSON + [SKIP TO TERMINATION]

RTI/232U-3624/22-02D

August 22, 1987

Youth Attitude Tracking Study II  
1987

SURVEY QUESTIONNAIRE

OMB # 0704-0069  
Expires 30 Sep 1989

Contract MDA903-86-C-0066  
Expiration Date: 4/1/88



Questionnaire Section A -- Education and Employment Items

401 I would like to speak with (NAME). IS (he/she) available?

- 1 = PERSON AVAILABLE
- 2 = PERSON NOT AVAILABLE + [SKIP TO CALL BACK SCREEN]
- 3 = REFUSAL - PERSON REFUSES TO GET ELIGIBLE PERSON TO  
PHONE + [SKIP TO CONVERSION SCREEN]
- 4 = REFUSAL OF ELIGIBLE PERSON + [SKIP TO TERMINATION]

(Hello, my name is \_\_\_\_\_. I am calling from the (Research Triangle Institute/Amrigon), a private research organization in (North Carolina/Michigan).)

We are conducting a study to help the Federal government learn more about the career and educational plans of young adults. While your participation is voluntary and you may choose not to answer any question, the information you give us is protected under the Privacy Act of 1974. This means your answers will be kept confidential and your identity will never be known to anyone except the research project staff. We are authorized to conduct this study under United States Code 10-503 and 2358 and Executive Order No. 9397.

402 WHAT IS THE GENDER OF THE PERSON ON THE LINE? [ASK IF NECESSARY:  
Are you male or female?]

- 1 = MALE
- 2 = FEMALE

403 Just to be sure that the information we got earlier is correct,  
what was your age on your last birthday?

ENTER AGE IN YEARS

FORMAT: 12  
RANGE: 16-24

404

Now I have a few questions about your educational experiences and plans. What is the highest grade or year of school or college that you have completed and gotten credit for?

GRADE SCHOOL

07 = LESS THAN 8th GRADE

08 = 8th GRADE

HIGH SCHOOL

09 = 9th GRADE

10 = 10th GRADE

11 = 11th GRADE

12 = 12th GRADE

4-YEAR COLLEGE OR UNIVERSITY

13 = 1st (FRESHMAN) YEAR

14 = 2nd (SOPHOMORE) YEAR

15 = 3rd (JUNIOR) YEAR

16 = 4th (SENIOR) YEAR

RESOLVE →

GRADUATE OR PROFESSIONAL SCHOOL

17 = 5th YEAR COLLEGE/1st YR GRAD or PROF SCHOOL

18 = 2nd YEAR GRAD or PROF SCHOOL

19 = 3RD YEAR GRAD or PROF SCHOOL

20 = MORE THAN 3 YEARS GRAD or PROF SCHOOL

RESOLVE →

JUNIOR OR COMMUNITY COLLEGE

21 = 1st YEAR

22 = 2nd YEAR

RESOLVE →

VOCATIONAL, BUSINESS, OR TRADE SCHOOL

23 = 1st YEAR

24 = 2nd YEAR

25 = MORE THAN 2 YEARS

RESOLVE →

98 = DK → [OUT OF RANGE]

99 = RE

RESOLVE →



405 What kinds of degrees, diplomas, or certificates have you received from the school(s) you've attended or for the training you've received? [ENTER CODE FOR EACH MENTION.]

01 = NONE + [ALLOWED FOR FIRST ENTRY ONLY, SKIP TO Q.407.]

02 = ADULT BASIC EDUCATION (ABE) CERTIFICATE

03 = GENERAL EDUCATIONAL DEVELOPMENT (GED) H.S. EQUIVALENCY CERTIFICATE

04 = HIGH SCHOOL DIPLOMA

05 = CERTIFICATE FROM VOCATIONAL, BUSINESS OR TRADE SCHOOL (e.g., LICENSE TO PRACTICE A TRADE).

RESOLVE → { 06 = 2-YEAR JUNIOR OR COMMUNITY COLLEGE (ASSOCIATE) DEGREE  
07 = BACHELOR'S DEGREE  
08 = ADVANCED GRADUATE OR PROFESSIONAL DEGREE (e.g., Masters, Ph.D., M.D., J.D., D.D.S.)

09 = OTHER DEGREE, DIPLOMA, CERTIFICATE

SKIP	IF Q.404 ≤ 11, SKIP TO Q.407
------	------------------------------

406 Do you have a regular high school diploma, a GED, an ABE, or some other kind of certificate (of high school completion)?

1 = REGULAR HIGH SCHOOL DIPLOMA

2 = ABE (ADULT BASIC EDUCATION) CERTIFICATE (e.g., CORRESPONDENCE, NIGHT SCHOOL)

3 = GED (GENERAL EDUCATIONAL DEVELOPMENT) EQUIVALENCY CERTIFICATE

4 = SOME OTHER KIND OF CERTIFICATE OF HIGH SCHOOL EQUIVALENCY

5 = NONE OF THE ABOVE

407 (In October, will you be/Are you) enrolled in any school, college, vocational or technical program, apprenticeship, or job training course?

1 = YES

2 = NO  
8 = DK  
9 = RE } → [SKIP TO Q.409B.]

408A What kind of school or training program (will you be/are you) enrolled in? [IF MULTIPLE RESPONSES, ENTER HIGHEST CODE.]

01 = NO SCHOOLS OR TRAINING PROGRAM + [1st ENTRY ONLY, SKIP TO Q.409B.]

IF Q.404 { 02 = ADULT BASIC EDUCATION (ABE) (H.S. COURSES IN NIGHT SCHOOL  
⇒ 12 OR BY CORRESPONDENCE)  
RESOLVE { 03 = TAKING HIGH SCHOOL COURSES IN REGULAR, DAY HIGH SCHOOL  
04 = GED OR H.S. EQUIVALENCY PROGRAM

05 = SKILL DEVELOPMENT PROGRAM (e.g., PUBLIC EMPLOYMENT, JOBS, OIC, WIN, JTPA)

06 = ON-THE-JOB TRAINING PROGRAM

07 = APPRENTICESHIP PROGRAM

IF Q.404 { 08 = VOCATIONAL, BUSINESS, OR TRADE SCHOOL  
<12, 09 = 2-YEAR JUNIOR OR COMMUNITY COLLEGE  
RESOLVE { 10 = 4-YEAR COLLEGE OR UNIVERSITY

SKIP

IF Q.408A ≠ 03 OR ≠ 09 OR ≠ 10, SKIP TO Q.409A.

408B (Will you be/Are you) in the (9th/10th/11th/12th) grade/(1st/2nd) year of college) (in October 1986/now)?

1 = YES +[Assign value: Q408C = Q.404 +1; SKIP TO Q.409A.]

2 = NO

408C What grade or year of college (will you be/are you) enrolled in (in October 1986/now)?

07 = LESS THAN 8th GRADE

08 = 8th GRADE

09 = 9th GRADE

10 = 10th GRADE

11 = 11th GRADE

12 = 12th GRADE

13 = 1st (FRESHMAN) YEAR OF 4-YEAR COLLEGE OR UNIVERSITY

14 = 2nd (SOPHOMORE) YEAR OF 4-YEAR COLLEGE OR UNIVERSITY

21 = 1st YEAR OF JUNIOR OR COMMUNITY COLLEGE

22 = 2nd YEAR OF JUNIOR OR COMMUNITY COLLEGE

23 = 1st YEAR OF VOCATIONAL, BUSINESS OR TRADE SCHOOL

24 = 2nd YEAR OF VOCATIONAL, BUSINESS OR TRADE SCHOOL

25 = BEYOND 2nd YEAR OF VOCATIONAL, BUSINESS, OR TRADE SCHOOL

98 = DK.

99 = RE

409A (Will you be/Are you) enrolled ...

1 = full-time or }  
2 = part-time } → [SKIP TO Q.410.A]

409B When did you last attend school? Please give me the month and year.

ENTER MONTH

FORMAT: 12 [USE LEADING ZERO]

RANGE: 01 - 12

ENTER YEAR

FORMAT: 12

RANGE: 75 - 86

410A Think about the 1987-1988 school year--that is, the school year after the one that starts this fall. Would you like to get more education or training by attending some kind of school or college during the '87-'88 school year?

1 = YES → [SKIP TO Q.411.]

2 = NO

410B How about sometime further into the future--would you like to get more schooling?

1 = YES

2 = NO }

8 = DK }

9 = RE }

→ [SKIP TO Q.415.]

411 What kind of school or college would you like to attend?

1 = HIGH SCHOOL → [SKIP TO Q.415.]

2 = VOCATIONAL, BUSINESS, OR TRADE SCHOOL

3 = TWO-YEAR JUNIOR OR COMMUNITY COLLEGE

4 = FOUR-YEAR COLLEGE OR UNIVERSITY

5 = GRADUATE OR PROFESSIONAL SCHOOL

412 Would that be as a full-time or part-time student?

1 = FULL-TIME

2 = PART-TIME

413

Considering all school and living expenses, approximately how much do you think it will cost you for one year of college or vocational training? Will it cost...

[PROBE: Just your best guess will do.]

- 1 = less than 1,000 dollars,
- 2 = at least 1,000 but less than 2,000 dollars,
- 3 = at least 2,000 but less than 3,000 dollars,
- 4 = at least 3,000 but less than 4,000 dollars
- 5 = at least 4,000 but less than 5,000 dollars, or
- 6 = 5,000 dollars or more?

414

Taking into account scholarships, government grants and loans, your own savings and earnings, and help from your family, how much of your yearly school and living expenses could you cover if you go to school? Would you say...

- 1 = all of your expenses,
- 2 = more than three-fourths
- 3 = about three-fourths,
- 4 = about half,
- 5 = about one-fourth
- 6 = less than one-fourth, or
- 7 = none of your expenses?

- 415 (Although you do not plan to be attending school in 1987-1988, what/What) is the highest grade or year of school or college that you would eventually like to complete?

GRADE SCHOOL

07 = LESS THAN 8th GRADE

08 = 8th GRADE

HIGH SCHOOL

09 = 9th GRADE

10 = 10th GRADE

11 = 11th GRADE

12 = 12th GRADE

4-YEAR COLLEGE OR UNIVERSITY

13 = 1st (FRESHMAN) YEAR

14 = 2nd (SOPHOMORE) YEAR

15 = 3rd (JUNIOR) YEAR

16 = 4th (SENIOR) YEAR

GRADUATE OR PROFESSIONAL SCHOOL

17 = 5th YEAR COLLEGE/1st YR GRAD or PROF SCHOOL

18 = 2nd YEAR GRAD or PROF SCHOOL

19 = 3rd YEAR GRAD or PROF SCHOOL

20 = MORE THAN 3 YEARS GRAD or PROF SCHOOL

JUNIOR OR COMMUNITY COLLEGE

21 = 1st YEAR

22 = 2nd YEAR

VOCATIONAL, BUSINESS, OR TRADE SCHOOL

23 = 1st YEAR

24 = 2nd YEAR

25 = MORE THAN 2 YEARS

98 = DK + [OUT OF RANGE]

99 = RE

- 416 Are you currently employed, either full time or part time?

1 = YES + [SKIP TO Q.422A.]

2 = NO

- 417 Are you looking for work now?

1 = YES

2 = NO

- 419 Have you ever had a job for pay?

1 = YES + [SKIP TO Q.422B.]

2 = NO } + [SKIP TO Q.434.]

9 = RE

422A Have you been looking for ...

- 1 = a new job,
- 2 = an additional job, or
- 3 = some other way to increase your income?
- 4 = NOT LOOKING.

422B During the last 12 months, how many weeks were you employed in which you worked for pay at least 10 hours per week?

ENTER NUMBER OF WEEKS

FORMAT: 12 [USE LEADING ZERO]  
RANGE: 00 - 52

Now, I have some questions about your (present/last) employment. If you (have/had) more than one job at the same time, I want you to answer for your main job. Usually, that's the job you work(ed) the most hours at, but you should answer for the job that you consider to (be/have been) your main job.

424A How many hours per week (do/did) you usually work at your (main/last) job?

ENTER NUMBER OF HOURS

FORMAT: 12 [USE LEADING ZERO]  
RANGE: 01-80

SKIP	IF Q.416 ≠ 2, SKIP TO Q.430.
------	------------------------------

424B When did you last work for pay? Please give me the month and year.

ENTER MONTH

FORMAT: 12 [USE LEADING ZERO]  
RANGE: 01-12

ENTER YEAR

FORMAT: 12  
RANGE: 73 - 86

430 At your (main/last) job, (are/were) you...

- 1 = an employee of a private company,
- 2 = a government employee
- 3 = self-employed in your own business, or
- 4 = working without pay in a family business or farm?

431 How satisfied (are/were) you with your (present/last) job?  
(Are/were) you...

- 1 = extremely satisfied,
- 2 = somewhat satisfied,
- 3 = neither satisfied nor dissatisfied
- 4 = somewhat dissatisfied, or
- 5 = extremely dissatisfied?

434 If you were to get a (different) full-time job within the next year, what wage, salary, or other rate of pay do you think you would earn?

ENTER AMOUNT OF PAY

FORMAT: 12345.67

RANGE: [SEE Q.435.]

435 Is that per... [PROBE: I have to be able to record that rate of pay using these time periods. Is that per...]

- |                     |                                |
|---------------------|--------------------------------|
| 1 = hour,           | Q.434 RANGE: 1.00 - 25.00      |
| 2 = per day,        | Q.434 RANGE: 3.00 - 100.00     |
| 3 = per week,       | Q.434 RANGE: 20.00 - 600.00    |
| 4 = every two weeks | Q.434 RANGE: 20.00 - 1,100.00  |
| 5 = twice a month,  | Q.434 RANGE: 20.00 - 1,100.00  |
| 6 = per month, or   | Q.434 RANGE: 30.00 - 3,000.00  |
| 7 = per year?       | Q.434 RANGE: 80.00 - 50,000.00 |

436 How easy or difficult is it for someone your age to get a full-time job in your community? Is it...

- 1 = almost impossible,
- 2 = very difficult,
- 3 = somewhat difficult, or
- 4 = not difficult at all?

437 And how easy or difficult is it for someone your age to get a part-time job in your community? Is it...

- 1 = almost impossible,
- 2 = very difficult,
- 3 = somewhat difficult, or
- 4 = not difficult at all?

438 Now, let's talk about your plans for the next few years. What do you think you might be doing? [PROBE: Anything else?] [ENTER CODE FOR ALL MENTIONS.]

- |                                  |                      |
|----------------------------------|----------------------|
| 1 = GOING TO SCHOOL              | } + [SKIP TO Q.501.] |
| 2 = WORKING                      |                      |
| 3 = DOING NOTHING                |                      |
| 4 = OTHER                        |                      |
| 5 = JOINING THE MILITARY/SERVICE |                      |

440 You said you might be joining the military. Which branch of the service would that be?

- 1 = AIR FORCE
- 2 = ARMY
- 3 = COAST GUARD
- 4 = MARINE CORPS
- 5 = NAVY
- 8 = DK
- 9 = RE } [SKIP TO Q.501.]

441 Which type of service would that be? Would it be...

- 1 = active duty,
- 2 = the Reserves, or
- 3 = the National Guard?

442 If you found for some reason you couldn't join the (Q.440 SERVICE), what service would be your next choice?

- 1 = AIR FORCE
- 2 = ARMY
- 3 = COAST GUARD
- 4 = MARINE CORPS
- 5 = NAVY
- 6 = NONE
- 8 = DK
- 9 = RE } +[SKIP TO Q.501.]

443 Which type of service would that be? Would it be...

- 1 = active duty,
- 2 = the Reserves, or
- 3 = the National Guard?



Questionnaire Sections B and C

Now, I'm going to read you a list of several things which young (men/women) your age might do in the next few years. For each one I read, please tell me how likely it is that you will be doing that.

- 501 First, how likely is it that you will be working as a (waitress in a restaurant/laborer in construction)? Would you say...
- 1 = definitely,
  - 2 = probably,
  - 3 = probably not, or
  - 4 = definitely not?
- 502 How likely it is that you will be working at a desk in a business office? Would you say...
- 1 = definitely,
  - 2 = probably,
  - 3 = probably not, or
  - 4 = definitely not?
- 503 How likely is it that you will be serving in the military? Would you say...
- 1 = definitely,
  - 2 = probably,
  - 3 = probably not, or
  - 4 = definitely not?
- 504 How likely is it that you will be working as a (saleswoman/salesman)? Would you say...
- 1 = definitely,
  - 2 = probably,
  - 3 = probably not, or
  - 4 = definitely not?

SERIES 505, 507, 509-513 ASKED IN SEQUENTIAL ORDER AFTER RANDOM START.

- 505 How likely is it that you will be serving in the National Guard? (Would you say...
- 1 = definitely,
  - 2 = probably,
  - 3 = probably not, or
  - 4 = definitely not?)
  - 8 = DK
  - 9 = RE
- } +[SKIP TO Q.507.]

506 Is that the...

- 1 = Air National Guard, or the
- 2 = Army National Guard?

507 How likely is it that you will be serving in the Reserves?  
(Would you say...

- 1 = definitely,
  - 2 = probably,
  - 3 = probably not, or
  - 4 = definitely not?)
  - 8 = DK
  - 9 = RE
- }+[SKIP TO Q.509.]

508 Is that the...

- 1 = Air Force Reserve,
- 2 = the Army Reserve,
- 3 = the Coast Guard Reserve,
- 4 = the Marine Corps Reserve, or
- 5 = the Naval Reserve?

509 How likely is it that you will be serving on active duty in the  
Coast Guard? (Would you say...

- 1 = definitely,
- 2 = probably,
- 3 = probably not, or
- 4 = definitely not?)

510 How likely is it that you will be serving on active duty in the  
Army? (Would you say...

- 1 = definitely,
- 2 = probably,
- 3 = probably not, or
- 4 = definitely not?)

511 How likely is it that you will be serving on active duty in the  
Air Force? (Would you say...

- 1 = definitely,
- 2 = probabiy,
- 3 = probably not, or
- 4 = definitely not?)

512      How likely is it that you will be serving on active duty in the Marine Corps? (Would you say...

- 1 = definitely,
- 2 = probably,
- 3 = probably not, or
- 4 = definitely not?)

513      How likely is it that you will be serving on active duty in the Navy? (Would you say...

- 1 = definitely,
- 2 = probably,
- 3 = probably not, or
- 4 = definitely not?)

514      Now, how likely is it that you will be going to college? (Would you say...

- 1 = definitely,
- 2 = probably,
- 3 = probably not, or
- 4 = definitely not?)

515      How likely is it that you will be going to vocational or technical school? (Would you say...

- 1 = definitely,
- 2 = probably,
- 3 = probably not, or
- 4 = definitely not?)

SKIP	IF MALE, SKIP TO Q.517.
------	-------------------------

516      How likely is it that you will be a full-time homemaker? (Would you say...

- 1 = definitely,
- 2 = probably,
- 3 = probably not, or
- 4 = definitely not?)

517

We've talked about several things you might be doing in the next few years. Taking everything into consideration, what are you most likely to be doing (in October 1987--that is, a year from this fall/after you finish high school)?

- |                                 |                           |
|---------------------------------|---------------------------|
| 1 = GOING TO SCHOOL FULL-TIME   | [IF "GOING TO SCHOOL"     |
| 2 = GOING TO SCHOOL PART-TIME   | OR "WORKING," PROBE:      |
| 3 = WORKING FULL-TIME           | Will that be full-time or |
| 4 = WORKING PART-TIME           | part-time?]               |
| 5 = SERVING IN THE MILITARY     |                           |
| 6 = BEING A FULL-TIME HOMEMAKER |                           |
| 7 = OTHER                       |                           |

SKIP A

IF Q.517  $\neq$  2 or  $\neq$  4, SKIP TO "SKIP B"

518

In addition to (going to school/working) part-time, what are you most likely to be doing (in October 1987/after you finish high school)?

- |                                 |                           |
|---------------------------------|---------------------------|
| 1 = GOING TO SCHOOL FULL-TIME   | [IF "GOING TO SCHOOL"     |
| 2 = GOING TO SCHOOL PART-TIME   | OR "WORKING," PROBE:      |
| 3 = WORKING FULL-TIME           | Will that be full-time or |
| 4 = WORKING PART-TIME           | part-time?]               |
| 5 = SERVING IN THE MILITARY     |                           |
| 6 = BEING A FULL-TIME HOMEMAKER |                           |
| 7 = OTHER                       |                           |

SKIP B

IF ONLY 1 OF Q.510-Q.513  $\leq$  2, SKIP TO Q.521.  
IF ALL OF Q.510-Q.513  $\Rightarrow$  3, SKIP TO Q.522.

520

You mentioned that you might serve in more than one military service. Which service are you most likely to serve in?

- 1 = AIR FORCE
- 2 = ARMY
- 3 = MARINE CORPS
- 4 = NAVY

521

If you were to join the military service, when do you think you would join? Would you join...

- 1 = within 6 months,
- 2 = between 6 months and 1 year from now,
- 3 = more than 1 year from now but less than 2 years, or
- 4 = would you join more than 2 years from now?

522 Now, I'd like to ask you in another way about the likelihood of your serving in the military. Think of a scale from zero to ten, with ten standing for the very highest likelihood of serving and zero standing for the very lowest likelihood of serving. How likely is it that you will be serving in the military in the next few years?

ENTER NUMBER                      FORMAT: 12 [USE LEADING ZERO.]  
RANGE: 00 (Lowest likelihood)--  
10 (Highest likelihood)

525 Before we talked today, had you ever considered the possibility of joining the military? Would you say that...

- 1 = you never thought about it,
- 2 = you gave it some consideration, or
- 3 = you gave it serious consideration?

554 The starting monthly pay for an enlisted person is approximately 600 dollars. Knowing this, how likely it is that you will be serving in the military in the next few years? Would you say...

- 1 = definitely,
- 2 = probably,
- 3 = probably not, or
- 4 = definitely not?

559 As far as you know, does any service have a program that helps pay for college or vocational training?

- 1 = YES
- 2 = NO
- 8 = DK } → [IF ACTIVE AND RESERVE SUBSAMPLE, SKIP TO Q.571.]
- 9 = RE } [IF ACTIVE-ONLY SUBSAMPLE, SKIP TO Q.601.]

560 Which service or services offer a program that helps pay for college or vocational training? [ENTER CODE FOR EACH MENTION.  
PROBE: Any others?]

- 1 = AIR FORCE
  - 2 = ARMY
  - 3 = MARINE CORPS
  - 4 = NAVY
- } → [IF ONLY 1 SERVICE MENTIONED, SKIP TO Q. 563.]

- 8 = DK } → [IF ACTIVE AND RESERVE SUBSAMPLE, SKIP TO Q.571.]
- 9 = RE } [IF ACTIVE-ONLY SUBSAMPLE, SKIP TO Q.601.]

561 Which service offers the largest educational benefits or do they all offer the same benefits? [PROBE: Just your best guess will do.]

- 1 = AIR FORCE
- 2 = ARMY
- 3 = MARINE CORPS
- 4 = NAVY
- 5 = ALL SERVICES OFFER SAME BENEFITS.

563 As you understand it, do the educational benefits provide money for college or vocational training...

- 1 = while a person is still in the military,
- 2 = only after a person leaves the military, or
- 3 = both?

SKIP

IF ACTIVE-ONLY SUBSAMPLE, SKIP TO Q.601.

Now, I'm going to ask you a few questions about the National Guard and the Reserves. As you may know, once basic training is completed, National Guard and Reserve members train every month and also attend a longer training period every year called "annual training."

571 How many days do you think members of the National Guard and Reserve train each month, once their basic training is completed? Do not include days spent at annual training. [PROBE: Just your best guess will do.]

ENTER NUMBER OF TRAINING  
DAYS PER MONTH

FORMAT: 12 [USE LEADING ZERO]  
RANGE: 01-30

572 How many days do you think National Guard and Reserve members spend at annual training camp each year? [PROBE: Just your best guess will do.]

ENTER NUMBER OF DAYS  
FOR ANNUAL TRAINING

FORMAT: 12 [USE LEADING ZERO]  
RANGE: 01-90

573 How much money do you think someone beginning service in the Guard or Reserves earns for each eight-hour training day?  
[PROBE: Just your best guess will do.]

ENTER AMOUNT OF PAY PER DAY      FORMAT: 123 [USE LEADING ZERO]  
RANGE: 001-555

SKIP	IF Q.416 = > 2, SKIP TO Q.579. IF Q.416 = 1 AND (3 <= Q.430 <=4), SKIP TO Q.579.
------	---

574 Currently, initial training in the National Guard or Reserve requires 3 to 6 months, full-time. Do you think your employer would hold a job for you if you were away for 3 to 6 months?

1 = YES  
2 = NO

575 If your employer held a job for you, do you think you would lose your job seniority during the initial 3 to 6 month training period for the National Guard or Reserves?

1 = YES  
2 = NO

576 Does your employer have a specific policy about participation in the National Guard or Reserves?

1 = YES  
2 = NO

577 With respect to Guard or Reserve participation, would you say your employer is ...

1 = positive,  
2 = neutral, or  
3 = negative?

578A Have you ever talked with any supervisor about your employer's policy about the National Guard or Reserves or has any supervisor ever talked about this with you?

1 = YES  
2 = NO

578B Are there any laws to protect Guard and Reserve members from losing their jobs or job seniority if they are absent from work to attend military training?

- 1 = YES
- 2 = NO
- 8 = DK

579 How likely would you be to enlist in the National Guard or Reserves for eight years if you received a 2,000 dollar bonus for joining? Would you ...

- 1 = definitely enlist + [SKIP TO Q.582.]
- 2 = probably enlist,
- 3 = probably not enlist, or
- 4 = definitely not enlist?

580 What if you received a 4,000 dollar bonus for eight years in the National Guard or Reserves? Would you...

- 1 = definitely enlist, + [SKIP TO Q.582.]

IF Q.580 {  
>Q.579, 2 = probably enlist,  
RESOLVE 3 = probably not enlist, or  
4 = definitely not enlist?

581 How about a 6,000 dollar bonus for eight years? (Would you...

- 1 = definitely enlist,

IF Q.581 {  
>Q.580, 2 = probably enlist,  
RESOLVE 3 = probably not enlist, or  
4 = definitely not enlist?)

582 Is there a National Guard or Reserve unit located close enough to you for you to join?

- 1 = YES
- 2 = NO



Questionnaire Section D -- Advertising, Recruiter Contact, and  
Demographic Items

601 For which military services do you recall seeing or hearing advertising that encouraged people to enlist in one or more of the services? [ENTER CODE FOR EACH MENTION. PROBE: Any other services?]

0 = NONE → [ALLOWED FOR FIRST MENTION ONLY--SKIP TO Q.602.]

1 = AIR FORCE

2 = ARMY

3 = COAST GUARD

4 = MARINE CORPS

5 = NAVY

6 = NATIONAL GUARD/RESERVES

7 = ONE AD FOR ALL SERVICES

8 = DK → [ALLOWED FOR FIRST MENTION ONLY--SKIP TO Q.602.]

9 = RE → [ALLOWED FOR FIRST MENTION ONLY--SKIP TO INTRO. BEFORE Q.610.]

THE Q.602-Q.608 SERIES IS ASKED CONTINGENT UPON RESPONSES TO Q.601, ACCORDING TO THE FOLLOWING ROUTINE:

1. IF EVERY SERVICE WAS MENTIONED IN Q.601, SKIP TO Q.609A.
2. IF Q.601 ≠ 7 AND RANDOM HALF-SAMPLE VALUE (RANGE = 00-99) < 50, ASK Q.608 BEFORE ASKING ANY OF Q.602-Q.607; OTHERWISE ASK Q.608 AFTER ASKING ALL OF Q.602-Q.607 (THAT HAVE TO BE ASKED).
3. PRESENT Q.602-Q.607 IN RANDOM ORDER. AS EACH QUESTION IN THE SERIES IS SELECTED BY THE RANDOMIZING ROUTINE FOR PRESENTATION, EXECUTE THE FOLLOWING STEP PRIOR TO ACTUAL PRESENTATION ON THE MONITOR: IF THE SERVICE WAS MENTIONED IN Q. 601, SKIP TO (THE NEXT QUESTION IN THE SERIES Q.602-Q.607/Q.608/Q.609A).

602 Do you recall seeing or hearing any advertising for the Air Force recently?

1 = YES

2 = NO

3 = MENTIONED IN Q.601

- 603 Do you recall seeing or hearing any advertising for the Army recently?
- 1 = YES  
2 = NO  
3 = MENTIONED IN Q.601
- 604 Do you recall seeing or hearing any advertising for the Coast Guard recently?
- 1 = YES  
2 = NO  
3 = MENTIONED IN Q.601
- 605 Do you recall seeing or hearing any advertising for the Marine Corps recently?
- 1 = YES  
2 = NO  
3 = MENTIONED IN Q.601
- 606 Do you recall seeing or hearing any advertising for the Navy recently?
- 1 = YES  
2 = NO  
3 = MENTIONED IN Q.601
- 607 Do you recall seeing or hearing any advertising for the National Guard/Reserves recently?
- 1 = YES  
2 = NO  
3 = MENTIONED IN Q.601
- 608 Do you recall seeing or hearing any advertising for all the services in one ad recently?
- 1 = YES  
2 = NO  
3 = MENTIONED IN Q.601

SKIP	IF NONE OF Q.602 - Q.608 = 1 OR = 3, SKIP TO INTRO BEFORE Q.610.
------	--

609A Other than trying to get you to enlist in the military, what was the main idea the advertising for (SERVICE SELECTED RANDOMLY FROM ALL SERVICES MENTIONED IN Q.601 AND ANY ADDITIONAL SERVICES WHOSE ADVERTISING WAS RECALLED IN Q.602-Q.608) was trying to get across?

[PROBE: What did it say or show?]

ENTER VERBATIM RESPONSE.

609B What slogan do you recall seeing or hearing in the advertising for the (Q.609A SERVICE)?

ENTER VERBATIM RESPONSE.

I am going to mention some slogans used by the military in its advertising. After I read each slogan, please tell me whether it is used by...

RANDOM HALF- SAMPLES	the Army, the Air Force, the Marine Corps, the Navy, or, by all four active duty services together in the same ad or commercial?	} → [SERVICES LISTED IN THIS SEQUENTIAL ORDER AFTER RANDOM START]
	all four active duty services together in the same ad or commercial, or by the Army, the Air Force, the Marine Corps or the Navy?	} → [SERVICES LISTED IN THIS SEQUENTIAL ORDER AFTER RANDOM START]

SERIES Q.610-Q.615B ASKED IN RANDOM ORDER.

610 Who in the military uses the advertising slogan, "Blank. It's not just a job. It's an adventure"?

- 1 = AIR FORCE
- 2 = ARMY
- 3 = MARINE CORPS
- 4 = NAVY
- 5 = ALL FOUR SERVICES IN SAME AD

611 Who in the military uses the advertising slogan, "The few. The proud. The Blank"?

- 1 = AIR FORCE
- 2 = ARMY
- 3 = MARINE CORPS
- 4 = NAVY
- 5 = ALL FOUR SERVICES IN SAME AD

612 Who in the military uses the advertising slogan, "Be all you can be"?

- 1 = AIR FORCE
- 2 = ARMY
- 3 = MARINE CORPS
- 4 = NAVY
- 5 = ALL FOUR SERVICES IN SAME AD

613A Who in the military uses the advertising slogan, "We're looking for a few good men"?

- 1 = AIR FORCE
- 2 = ARMY
- 3 = MARINE CORPS
- 4 = NAVY
- 5 = ALL FOUR SERVICES IN SAME AD

614 Who in the military uses the advertising slogan, "It's a great place to start"?

- 1 = AIR FORCE
- 2 = ARMY
- 3 = MARINE CORPS
- 4 = NAVY
- 5 = ALL FOUR SERVICES IN SAME AD

615A Who in the military uses the advertising slogan, "Aim high.  
Blank"?

- 1 = AIR FORCE
- 2 = ARMY
- 3 = MARINE CORPS
- 4 = NAVY
- 5 = ALL FOUR SERVICES IN SAME AD

615B Who in the military uses the advertising slogan, "We're not a company--we're your country"?

- 1 = AIR FORCE
- 2 = ARMY
- 3 = MARINE CORPS
- 4 = NAVY
- 5 = ALL FOUR SERVICES IN SAME AD

616 Within the last 12 months, do you recall seeing any advertising for the military in magazines, newspapers, or on billboards?

- 1 = YES
  - 2 = NO
  - 8 = DK
  - 9 = RE
- } →[SKIP TO Q.618.]

617

For which military services did you see this kind of advertising?  
[PROBE: Any others? ENTER CODE FOR EACH MENTION.]

- 1 = ARMY
- 2 = NAVY
- 3 = AIR FORCE
- 4 = MARINE CORPS
- 5 = COAST GUARD
- 6 = ALL ACTIVE SERVICES IN SAME AD
- 7 = ARMY NATIONAL GUARD
- 8 = ARMY RESERVE
- 9 = NAVAL RESERVE
- 10 = AIR NATIONAL GUARD
- 11 = AIR FORCE RESERVE
- 12 = MARINE CORPS RESERVE
- 13 = ALL NATIONAL GUARD/RESERVES

618

Within the last 12 months, do you recall any television or radio advertising for the military?

1 = YES

2 = NO  
8 = DK  
9 = RE } + [SKIP TO Q.620.]

619

For which military services did you see or hear this kind of advertising? [PROBE: Any others? ENTER CODE FOR EACH MENTION.]

- 1 = ARMY
- 2 = NAVY
- 3 = AIR FORCE
- 4 = MARINE CORPS
- 5 = COAST GUARD
- 6 = ALL ACTIVE SERVICES IN SAME AD
- 7 = ARMY NATIONAL GUARD
- 8 = ARMY RESERVE
- 9 = NAVAL RESERVE
- 10 = AIR NATIONAL GUARD
- 11 = AIR FORCE RESERVE
- 12 = MARINE CORPS RESERVE
- 13 = ALL NATIONAL GUARD/RESERVES

SKIP

IF OLDER SUBSAMPLES, SKIP TO Q.628.

620 Within the last 12 months, have you received any military recruiting literature in the mail without asking for it?

1 = YES

2 = NO  
8 = DK  
9 = RE } → [SKIP TO Q.622.]

621 Which military services did you get literature about? [ENTER CODE FOR EACH MENTION. DO NOT PROBE.]

1 = AIR FORCE  
2 = ARMY  
3 = MARINE CORPS  
4 = NAVY  
5 = ALL SERVICES TOGETHER  
6 = NATIONAL GUARD  
7 = RESERVES

622 Within the last 12 months, have you made a toll-free call for information about the military?

1 = YES

2 = NO  
8 = DK  
9 = RE } → [SKIP TO Q.625]

623 Which military services did you call about? [ENTER CODE FOR EACH MENTION. DO NOT PROBE.]

1 = AIR FORCE  
2 = ARMY  
3 = MARINE CORPS  
4 = NAVY  
5 = ALL SERVICES TOGETHER  
6 = NATIONAL GUARD  
7 = RESERVES

625 Within the last 12 months, have you sent a postcard or coupon for information about the military?

1 = YES

2 = NO  
8 = DK  
9 = RE } → [SKIP TO Q.627.]

626 Which military services did you send for information about?  
[ENTER CODE FOR EACH MENTION. DO NOT PROBE.]

- 1 = AIR FORCE
- 2 = ARMY
- 3 = MARINE CORPS
- 4 = NAVY
- 5 = ALL SERVICES TOGETHER
- 6 = NATIONAL GUARD
- 7 = RESERVES

627 Within the last 12 months, have you visited a recruiting station for information about the military?

- 1 = YES
- 2 = NO

628 Have you ever talked with any military recruiter to get information about the military?

- 1 = YES
  - 2 = NO
  - 8 = DK
  - 9 = RE
- } → [SKIP TO Q.630.]

629 What service or services of the military did the recruiter represent? [ENTER CODE FOR EACH MENTION. PROBE: Any other service's recruiter? UNTIL NO MORE MENTIONS.]

- 1 = AIR FORCE
  - 2 = ARMY
  - 3 = MARINE CORPS
  - 4 = NAVY
  - 8 = DK
  - 9 = RE
- } [SKIP TO Q.645.]

SKIP

IF Q.629 = 1, SKIP TO Q.631.  
IF Q.629 ≠ 1 AND Q.629 = 2, SKIP TO Q.634.  
IF Q.629 ≠ 1 OR 2 AND Q.629 = 3, SKIP TO Q.637.  
IF Q.629 ≠ 1 OR 2 OR 3 AND Q.629 = 4, SKIP TO Q.640.



630 Do you think that, in the future, you might talk to a recruiter to get information about the military?

1 = YES }  
2 = NO }  
8 = DK } +[SKIP TO Q.645.]  
9 = RE }

631 Did the Air Force recruiter represent the... [ENTER CODE FOR EACH MENTION.]

1 = active Air Force,  
2 = the Air Force Reserve, or  
3 = the Air National Guard?

632A How did you and the Air Force recruiter get in touch the first time you talked? Did you...

1 = get a phone call from the recruiter, or }  
2 = did you call the recruiter, or }  
3 = talk at a recruiting station, or } +[SKIP TO Q.633.]  
4 = talk at a job fair, or }  
5 = talk at school, or }  
6 = did you get in touch some other way? }

632B How did you and the Air Force recruiter get in touch the first time you talked?

ENTER VERBATIM RESPONSE.

633 When did you last talk with the Air Force recruiter--what month and year was your last contact with an Air Force recruiter?

ENTER MONTH

FORMAT: 12 [USE LEADING ZERO.]  
RANGE: 01-12

ENTER YEAR

FORMAT: 12  
RANGE: 73-86

SKIP	IF Q.629 ≠ 2 AND Q.629 = 3, SKIP TO Q.637. IF Q.629 ≠ 2 OR 3 AND Q.629 = 4, SKIP TO Q.640. IF Q.629 ≠ 2 OR 3 OR 4, SKIP TO Q.645.
------	---

634 Did the Army recruiter represent the... [ENTER CODE FOR EACH MENTION.]

- 1 = active Army,
- 2 = the Army Reserve, or
- 3 = the Army National Guard?

635A How did you and the Army recruiter get in touch the first time you talked? Did you...

- 1 = get a phone call from the recruiter, or
  - 2 = did you call the recruiter, or
  - 3 = talk at a recruiting station, or
  - 4 = talk at a job fair, or
  - 5 = talk at school, or
- } + [SKIP TO Q.636.]

6 = did you get in touch some other way?

635B How did you and the Army recruiter get in touch the first time your talked?

ENTER VERBATIM RESPONSE.

636 When did you last talk with the Army recruiter--what month and year was your last contact with an Army recruiter?

ENTER MONTH

FORMAT: 12 [USE LEADING ZERO.]  
RANGE: 01-12

ENTER YEAR

FORMAT: 12  
RANGE: 73-86

SKIP

IF Q.629 ≠ 3 AND Q.629 = 4, SKIP TO Q.640.  
IF Q.629 ≠ 3 OR 4, SKIP TO Q.645.

637 Did the Marine Corps recruiter represent the...

- 1 = active Marine Corps, or
- 2 = the Marine Corps Reserve?
- 3 = BOTH OF THE COMPONENTS ABOVE

638A How did you and the Marine Corps recruiter get in touch the first time you talked? Did you...

- 1 = get a phone call from the recruiter, or
  - 2 = did you call the recruiter, or
  - 3 = talk at a recruiting station, or
  - 4 = talk at a job fair, or
  - 5 = talk at school, or
  - 6 = did you get in touch some other way?
- } + [SKIP TO Q.639.]

638B How did you and the Marine Corps recruiter get in touch the first time you talked?

ENTER VERBATIM RESPONSE.

639 When did you last talk with the Marine Corps recruiter--what month and year was your last contact with a Marine Corps recruiter?

ENTER MONTH

FORMAT: 12 [USE LEADING ZERO.]  
RANGE: 01-12

ENTER YEAR

FORMAT: 12  
RANGE: 73-86

SKIP	IF Q.629 ≠ 4, SKIP TO Q.645.
------	------------------------------

640 Did the Navy recruiter represent the...

- 1 = active Navy, or
- 2 = the Naval Reserves?
- 3 = BOTH OF THE COMPONENTS ABOVE

641A How did you and the Navy recruiter get in touch the first time you talked? Did you...

- 1 = get a phone call from the recruiter, or
  - 2 = did you call the recruiter, or
  - 3 = talk at a recruiting station, or
  - 4 = talk at a job fair, or
  - 5 = talk at a school, or
  - 6 = did you get in touch some other way?
- } → [SKIP TO Q.642.]

641B How did you and the Navy recruiter get in touch the first time you talked?

ENTER VERBATIM RESPONSE.

642 When did you last talk with the Navy recruiter--what month and year was your last contact with a Navy recruiter?

ENTER MONTH

FORMAT: 12 [USE LEADING ZERO.]  
RANGE: 01-12

ENTER YEAR

FORMAT: 12  
RANGE: 73-86

645 Have you ever taken the three-hour written test called the ASVAB that is required to enter the military?

1 = YES + [SKIP TO Q.647.]

2 = NO

8 = DK

646 Do you think you might take the written test required for the military in the future?

1 = YES  
2 = NO  
8 = DK } + [SKIP TO Q.649.]

647 Where did you take this written test? Did you take the ASVAB...

1 = at your high school,

2 = at a Military Entrance Processing Station (MEPS), OR

3 = somewhere else?

Now, I'd like to get some opinions about the four active-duty Services. Please tell me which Service, if any, you think about first when I mention each item.

SERIES Q.650--Q.659 ASKED IN RANDOM ORDER.

WITHIN EACH QUESTION IN THE SERIES Q.650--Q.659, THE SERVICES ARE LISTED IN ONE OF FOUR SEQUENCES. THE PARTICULAR SEQUENCE IS DETERMINED RANDOMLY BEFORE ANY QUESTION IN THE SERIES IS PRESENTED AND THAT SEQUENCE IS USED FOR EVERY QUESTION IN THE SERIES.

650 (Which one Service do you think of first when I mention...)

"Provides money for education? Do you first think of the...

- 1 = (Army/Navy/Marines/Air Force),
- 2 = (Navy/Marines/Air Force/Army),
- 3 = (Marines/Air Force/Army/Navy), or
- 4 = (Air Force/Army/Navy/Marines?)
- 6 = NONE OF THE SERVICES

[IF MORE THAN ONE SERVICE MENTIONED, PROBE: Which one Service do you think of first when I mention "provides money for education?"]

651 (Which one Service do you think of first when I mention...)

"Lack of personal freedom?" (Do you first think of the ...

- 1 = (Army/Navy/Marines/Air Force),
- 2 = (Navy/Marines/Air Force/Army),
- 3 = (Marines/Air Force/Army/Navy), or
- 4 = (Air Force/Army/Navy/Marines?)
- 6 = NONE OF THE SERVICES

[IF MORE THAN ONE SERVICE MENTIONED, PROBE: Which one Service do you think of first when I mention "lack of personal freedom?"]

652 (Which one Service do you think of first when I mention...)

"Teaches valuable skills and trades?" (Do you first think of the...)

- 1 = (Army/Navy/Marines/Air Force),
- 2 = (Navy/Marines/Air Force/Army),
- 3 = (Marines/Air Force/Army/Navy), or
- 4 = (Air Force/Army/Navy/Marines)?)
- 6 = NONE OF THE SERVICES

[IF MORE THAN ONE SERVICE MENTIONED, PROBE: Which one Service do you think of first when I mention "teaches valuable skills and trades?"]

653 (Which one Service do you think of first when I mention...)

"Extended duty away from immediate family?" (Do you first think of the ...)

- 1 = (Army/Navy/Marines/Air Force),
- 2 = (Navy/Marines/Air Force/Army),
- 3 = (Marines/Air Force/Army/Navy), or
- 4 = (Air Force/Army/Navy/Marines)?)
- 6 = NONE OF THE SERVICES

[IF MORE THAN ONE SERVICE MENTIONED, PROBE: "Which one Service do you think of first when I mention extended duty away from immediate family?"]

654 (Which one Service do you think of first when I mention...)

"Opportunities for promotion and advancement?" (Do you first think of the ...)

- 1 = (Army/Navy/Marines/Air Force),
- 2 = (Navy/Marines/Air Force/Army),
- 3 = (Marines/Air Force/Army/Navy), or
- 4 = (Air Force/Army/Navy/Marines)?)
- 6 = NONE OF THE SERVICES

[IF MORE THAN ONE SERVICE MENTIONED, PROBE: Which one Service do you think of first when I mention "opportunities for promotion and advancement?"]

655 (Which one Service do you think of first when I mention...)

"Equal pay and advancement for men and women?" (Do you first think of the ...)

- 1 = (Army/Navy/Marines/Air Force),
- 2 = (Navy/Marines/Air Force/Army),
- 3 = (Marines/Air Force/Army/Navy), or
- 4 = (Air Force/Army/Navy/Marines?)
- 6 = NONE OF THE SERVICES

[IF MORE THAN ONE SERVICE MENTIONED, PROBE: Which one Service do you think of first when I mention "equal pay and advancement for men and women?"]

656 (Which one Service do you think of first when I mention...)

"Assignment to work that does not prepare you for a civilian career?" (Do you first think of the ...)

- 1 = (Army/Navy/Marines/Air Force),
- 2 = (Navy/Marines/Air Force/Army),
- 3 = (Marines/Air Force/Army/Navy), or
- 4 = (Air Force/Army/Navy/Marines?)
- 6 = NONE OF THE SERVICES

[IF MORE THAN ONE SERVICE MENTIONED, PROBE: Which one Service do you think of first when I mention "assignment to work that does not prepare you for a civilian career?"]

657 (Which one Service do you think of first when I mention...)

"Defending your country?" (Do you first think of the ...)

- 1 = (Army/Navy/Marines/Air Force),
- 2 = (Navy/Marines/Air Force/Army),
- 3 = (Marines/Air Force/Army/Navy), or
- 4 = (Air Force/Army/Navy/Marines?)
- 6 = NONE OF THE SERVICES

[IF MORE THAN ONE SERVICE MENTIONED, PROBE: Which one Service do you think of first when I mention "defending your country?"]

658 (Which one Service do you think of first when I mention...)

"Working in a high-technology environment?" (Do you first think of the ...)

- 1 = (Army/Navy/Marines/Air Force),
- 2 = (Navy/Marines/Air Force/Army),
- 3 = (Marines/Air Force/Army/Navy), or
- 4 = (Air Force/Army/Navy/Marines?)
- 6 = NONE OF THE SERVICES

[IF MORE THAN ONE SERVICE MENTIONED, PROBE: Which one Service do you think of first when I mention "working in a high-technology environment?"]

659 Which one Service do you think of first when I mention...

"Work in or near a combat zone?" (Do you first think of the ...)

- 1 = (Army/Navy/Marines/Air Force),
- 2 = (Navy/Marines/Air Force/Army),
- 3 = (Marines/Air Force/Army/Navy), or
- 4 = (Air Force/Army/Navy/Marines?)
- 6 = NONE OF THE SERVICES

[IF MORE THAN ONE SERVICE MENTIONED, PROBE: Which one Service do you think of first when I mention "work in or near a combat zone?"]

682 Has a good friend or close relative of yours signed up with one of the military services within the last 6 months?

- 1 = YES
- 2 = NO

683 Within the last year or so, have you discussed with anyone the possibility of your serving in the military?

- 1 = YES

- 2 = NO
  - 8 = DK
  - 9 = RE
- } + [SKIP TO Q.690.]



684A With whom did you discuss serving in the military? [DO NOT READ LIST. PROBE: Anyone else?] [ENTER CODE FOR EACH MENTION.]

01 = FRIENDS  
02 = MOTHER  
03 = FATHER  
04 = A BROTHER OR SISTER  
05 = SOME OTHER RELATIVE  
06 = BOY/GIRL FRIEND OR SPOUSE  
07 = A TEACHER  
08 = A COUNSELOR AT SCHOOL  
09 = A RECRUITER  
10 = A CO-WORKER  
11 = AN EMPLOYER

SKIP	IF Q.684A ≠ 1 OR ≠ 2 OR ≠ 3 OR ≠ 4 OR ≠ 5 OR ≠ 6, SKIP TO Q.690. IF Q.684A ≠ 1 OR ≠ 2 OR ≠ 3 OR ≠ 4 OR ≠ 5 AND = 6, SKIP TO Q.684B6 IF Q.684A ≠ 1 OR ≠ 2 OR ≠ 3 OR ≠ 4 AND = 5, SKIP TO Q.684B5. IF Q.684A ≠ 1 OR ≠ 2 OR ≠ 3 AND = 4, SKIP TO Q.684B4. IF Q.684A ≠ 1 OR ≠ 2 AND = 3, SKIP TO Q.684B3. IF Q.684A ≠ 1 AND = 2, SKIP TO Q.684B2.
------	--

684B1 (Is this/Are any of these) friend(s) currently serving on active duty in the military?

1 = YES  
2 = NO

SKIP	IF Q.684B1 ≠ 1 AND (Q.684A ≠ 2 OR ≠ 3 OR ≠ 4 OR ≠ 5 OR ≠ 6), SKIP TO Q.690. IF Q.684B1 ≠ 1 AND (Q.684A ≠ 2 OR ≠ 3 OR ≠ 4 OR ≠ 5 AND = 6), SKIP TO Q.684B6. IF Q.684B1 ≠ 1 AND (Q.684A ≠ 2 OR ≠ 3 OR ≠ 4 AND = 5), SKIP TO Q.684B5. IF Q.684B1 ≠ 1 AND (Q.684A ≠ 2 OR ≠ 3 AND = 4), SKIP TO Q.684B4. IF Q.684B1 ≠ 1 AND (Q.684A ≠ 2 AND = 3), SKIP TO Q.684B3. IF Q.684B1 ≠ 1 AND Q.684 = 2, SKIP TO Q.684B2.
------	--

SKIP	IF Q.684A $\neq$ 2 OR $\neq$ 3 OR $\neq$ 4 OR $\neq$ 5 OR $\neq$ 6, SKIP TO Q.690. IF Q.684A $\neq$ 2 OR $\neq$ 3 OR $\neq$ 4 OR $\neq$ 5 AND = 6, SKIP TO Q.684B6. IF Q.684A $\neq$ 2 OR $\neq$ 3 OR $\neq$ 4 AND = 5, SKIP TO Q.684B5. IF Q.684A $\neq$ 2 OR $\neq$ 3 AND = 4, SKIP TO Q.684B4. IF Q.684A $\neq$ 2 AND = 3, SKIP TO Q.684B3.
------	--

684B2      Is your mother currently serving on active duty in the military?

1 = YES  
2 = NO

SKIP	IF Q.684A $\neq$ 3 OR $\neq$ 4 OR $\neq$ 5 OR $\neq$ 6, SKIP TO Q.690. IF Q.684A $\neq$ 3 OR $\neq$ 4 OR $\neq$ 5 AND = 6, SKIP TO Q.684B6. IF Q.684A $\neq$ 3 OR $\neq$ 4 AND = 5, SKIP TO Q.684B5. IF Q.684A $\neq$ 3 AND = 4, SKIP TO Q.684B4.
------	--

684B3      Is your father currently serving in the active duty in the military?

1 = YES  
2 = NO

SKIP	IF Q.684A $\neq$ 4 OR $\neq$ 5 OR $\neq$ 6, SKIP TO Q.690. IF Q.684A $\neq$ 4 OR $\neq$ 5 AND = 6, SKIP TO Q.684B6. IF Q.684A $\neq$ 4 AND = 5, SKIP TO Q.684B5.
------	--

Q684B4 Is your brother or sister currently serving on active duty in the military?

1 = YES

2 = NO

SKIP

IF Q.684A  $\neq$  5 OR  $\neq$  6, SKIP TO Q.690.  
IF Q.684A  $\neq$  5 AND = 6, SKIP TO 684B6.

Q684B5 Is your (other relative) currently serving on active duty in the military?

1 = YES

2 = NO

SKIP

IF Q.684A  $\neq$  6, SKIP TO Q.690.

684B6 Is your ((boy/girl) friend/spouse) currently serving on active duty in the military?

1 = YES

2 = NO

690 If a good friend of yours asked your advice about seeing a military recruiter, would you say it was...

1 = a waste of time,

2 = up to him or her, or

3 = a good idea?

691 How do the people who matter most to you feel about your serving in the active military? Would you say that most of them are...

1 = very favorable

2 = somewhat favorable,

3 = neither favorable nor unfavorable,

4 = somewhat unfavorable, or

5 = very unfavorable toward your serving in the active military?

- 692      How do you feel about serving in the active military yourself?  
Are you...
- 1 = very favorable
  - 2 = somewhat favorable,
  - 3 = neither favorable nor unfavorable,
  - 4 = somewhat unfavorable, or
  - 5 = very unfavorable toward your serving in the active military?

Next, I have a few questions about your education.

- 698      Have you ever taken a college entrance examination such as the  
PSAT (Preliminary Scholastic Aptitude Test), the SAT (Scholastic  
Aptitude Test), or the ACT (American College Testing Program)?
- 1 = YES → [SKIP TO Q.700.]
  - 2 = NO
- 699      In the future do you plan to take a college entrance examination?
- 1 = YES
  - 2 = NO

SKIP	IF Q.404 <9 AND Q.407⇒ 2, SKIP TO Q.713A.
------	---

- 700      What grades (do/did) you usually get in high school?
- 1 = Mostly A's (a numerical average of 90-100)
  - 2 = Mostly A's and B's (85-89)
  - 3 = Mostly B's (80-84)
  - 4 = Mostly B's and C's (75-79)
  - 5 = Mostly C's (70-74)
  - 6 = Mostly C's and D's (65-69)
  - 7 = Mostly D's and F's (64 and below)
- 701      (Is/Was) your high school program...
- 1 = academic or college preparatory,
  - 2 = commercial or business training,
  - 3 = vocational or technical?

Now I have a list of high school mathematics and technical courses. As I read each one, please tell me whether you have taken or plan to take that course in regular high school.

702 Elementary algebra (ALGEBRA I)

- 1 = TAKEN
- 2 = PLAN TO TAKE
- 3 = NOT TAKEN

703 Plane geometry

- 1 = TAKEN
- 2 = PLAN TO TAKE
- 3 = NOT TAKEN

704 Business math

- 1 = TAKEN
- 2 = PLAN TO TAKE
- 3 = NOT TAKEN

705 Computer science

- 1 = TAKEN
- 2 = PLAN TO TAKE
- 3 = NOT TAKEN

706 Intermediate algebra (ALGEBRA II)

- 1 = TAKEN
- 2 = PLAN TO TAKE
- 3 = NOT TAKEN

707 Trigonometry

- 1 = TAKEN
- 2 = PLAN TO TAKE
- 3 = NOT TAKEN

708 Calculus

- 1 = TAKEN
- 2 = PLAN TO TAKE
- 3 = NOT TAKEN

709        Physics

- 1 = TAKEN
- 2 = PLAN TO TAKE
- 3 = NOT TAKEN

SKIP            IF OLDER MALE OR OLDER FEMALE, SKIP TO Q.713A.
--

710        (Does/Did) your high school have a computerized system that provide(s/d) information about careers?

- 1 = YES
- 2 = NO
- 3 = DK    } → [SKIP TO Q.713A.]

711        In using this system, did you get any information about the military?

- 1 = YES
- 2 = NO
- 3 = DID NOT USE SYSTEM } → [SKIP TO Q.713A]

712        Did the information about the military that you got from the system increase your interest in the military?

- 1 = YES
- 2 = NO

713A       What is the highest grade or year of school or college that your father completed?

- 07 = LESS THAN 8th GRADE
- 08 = 8th GRADE
- 09 = 9th GRADE
- 10 = 10th GRADE
- 11 = 11th GRADE
- 12 = 12th GRADE
- 13 = 1st YEAR COLLEGE/JR. or COMM. COLLEGE/VOCATIONAL, BUS., OR TRADE SCHOOL (FRESHMAN)
- 14 = 2nd YEAR COLLEGE/JR. or COMM. COLLEGE/VOCATIONAL, BUS., OR TRADE SCHOOL (SOPHOMORE)
- 15 = 3rd YEAR OF 4-YEAR COLLEGE (JUNIOR)
- 16 = 4th YEAR OF 4-YEAR COLLEGE (SENIOR)
- 17 = 5th YEAR COLLEGE/1st YEAR GRAD. OR PROF. SCHOOL
- 18 = 2nd YEAR GRADUATE OR PROFESSIONAL SCHOOL
- 19 = 3rd YEAR GRADUATE OR PROFESSIONAL SCHOOL
- 20 = MORE THAN 3 YEARS GRADUATE/PROFESSIONAL SCHOOL

713 What is the highest grade or year of school or college that your mother completed?

- 07 = LESS THAN 8th GRADE
- 08 = 8th GRADE
- 09 = 9th GRADE
- 10 = 10th GRADE
- 11 = 11th GRADE
- 12 = 12th GRADE
- 13 = 1st YEAR COLLEGE/JR. or COMM. COLLEGE/VOCATIONAL, BUS., OR TRADE SCHOOL (FRESHMAN)
- 14 = 2nd YEAR COLLEGE/JR. or COMM. COLLEGE/VOCATIONAL, BUS., OR TRADE SCHOOL (SOPHOMORE)
- 15 = 3rd YEAR OF 4-YEAR COLLEGE (JUNIOR)
- 16 = 4th YEAR OF 4-YEAR COLLEGE (SENIOR)
- 17 = 5th YEAR COLLEGE/1st YEAR GRAD. OR PROF. SCHOOL
- 18 = 2nd YEAR GRADUATE OR PROFESSIONAL SCHOOL
- 19 = 3rd YEAR GRADUATE OR PROFESSIONAL SCHOOL
- 20 = MORE THAN 3 YEARS GRADUATE/PROFESSIONAL SCHOOL

713C Just to be sure we are representing all groups in our survey, I need to ask you a few more questions. Please tell me whether you are currently...

- 1 = married,
- 2 = widowed,
- 3 = separated,
- 4 = divorced, or
- 5 = are you single and never been married?

713D Not counting yourself (but counting your spouse), how many dependents do you have--that is, how many people depend on you for more than 50 percent of their support?

ENTER NUMBER OF DEPENDENTS                      FORMAT: 12 [USE LEADING ZERO.]  
RANGE: 00-10

713E How many brothers do you have? Please include step-brothers and half-brothers.

ENTER NUMBER OF BROTHERS                      FORMAT: 12 [USE LEADING ZERO.]  
RANGE: 00-27

713F How many sisters do you have? Please include step-sisters and half-sisters.

ENTER NUMBER OF SISTERS                      FORMAT: 12 [USE LEADING ZERO.]  
RANGE: 00-27

Which of the following people live in the same household with you?

713G1 Your mother?

1 = YES

2 = NO → [PROBE: What about a step-mother or female guardian?]

713G2 Your father?

1 = YES

2 = NO → [PROBE: What about a step-father or male guardian?]

SKIP	IF Q.713E = 0 AND Q.713F = 0 AND Q.713C ≠ 1, SKIP TO Q.713G6. IF Q.713E = 0 AND Q.713F = 0 AND Q.713C = 1, SKIP TO Q.713G5. IF Q.713E = 0 AND Q.713F > 0, SKIP TO Q.713G4.
------	--

713G3 (Your brother(s)?)

1 = YES

2 = NO → [PROBE: What about step-brother(s) or half-brother(s)?]

SKIP	IF Q.713F = 0 AND Q.713C ≠ 1, SKIP TO Q.713G6. IF Q.713F = 0 AND Q.713C = 1, SKIP TO Q.713G5.
------	--

713G4 (Your sister(s)?)

1 = YES

2 = NO → [PROBE: What about step-sister(s) or half-sister(s)?]

SKIP	IF Q.713C ≠ 1, SKIP TO Q.713G6.
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713G5 (Your (husband/wife)?)

1 = YES

2 = NO

713G6 Your children?

1 = YES

2 = NO → [PROBE: What about step-children or wards?]

713G7 Any other relatives?

1 = YES

2 = NO



713G8 Any non-relatives?

- 1 = YES
- 2 = NO

SKIP	IF ANY OF Q.713G1 through Q.713G8 = 1, SKIP to Q.714.
------	---

713H Do you live alone then?

- 1 = YES

RESOLVE → 2 = NO

- 8 = DK → [OUT OF RANGE.]

714 Do you consider yourself... [IF "HISPANIC" PROBE: Do you consider your race to be white, black, Asian, or American Indian?]

- 1 = white?
- 2 = black?
- 3 = Asian or Pacific Islander? (INCLUDES CHINESE, JAPANESE, FILIPINO, KOREAN, VIETNAMESE, PACIFIC ISLANDER, ASIAN INDIAN, OR OTHER ASIAN)
- 4 = American Indian or Alaskan Native?

715 Are you of Hispanic background? [INCLUDES SPANISH-AMERICAN, MEXICAN-AMERICAN, PUERTO RICAN, CHICANO, CUBAN-AMERICAN, ETC.]

- 1 = YES, HISPANIC BACKGROUND
- 2 = NO, NOT HISPANIC BACKGROUND

716 Now, I need to record your Social Security Number. By law, you do not have to tell me your Social Security Number, but it would help our study--so, can you tell me what it is? [PROBE: Would you look it up? I'll wait.]

ENTER THE 9 DIGIT SOCIAL SECURITY NUMBER OR THE CHARACTERS BELOW.

FORMAT: 123456789

- DK = Doesn't know
- N = No SSN
- RE = Refusal
- X = Asked questions

SKIP	IF Q.716 ≠ RE or X, SKIP TO Closing Statement.
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717

We need this information for use in another study that matches enlistments in the Armed Forces to some of the ideas we've been discussing in this interview.

ENTER THE 9 DIGIT SOCIAL SECURITY NUMBER OR THE CHARACTERS BELOW.

FORMAT: 123456789

DK = Doesn't know

N = No SSN

RE = Refusal